

20 November 2018

Ms. Emma Best MuckRock News Dept. MR 61245 411A Highland Avenue Somerville, MA 02144

Reference: F-2018-02700

Dear Ms. Best:

This is a final response to your 27 September 2018 Freedom of Information Act request for the following record: a copy of the historical study, The Map Information Section of OSS and Department of State, 1941-45: Predecessor of the Map Library and Geography Divisions.

We conducted a search of our previously released database and located the document you requested, consisting of 156 pages. Because you are entitled to the first 100 pages free and the remaining amount would be minimal, there is no charge for processing your request.

If you have any questions regarding our response, you may contact us at:

Central Intelligence Agency Washington, DC 20505 Information and Privacy Coordinator 703-613-3007 (Fax)

Sincerely,

Allison Fong

Information and Privacy Coordinator

Enclosure

Explanation of Exemptions

Freedom of Information Act:

- (b)(1) exempts from disclosure information currently and properly classified, pursuant to an Executive Order;
- (b)(2) exempts from disclosure information which pertains solely to the internal personnel rules and practices of the Agency;
- (b)(3) exempts from disclosure information that another federal statute protects, provided that the other federal statute either requires that the matters be withheld, or establishes particular criteria for withholding or refers to particular types of matters to be withheld. The (b)(3) statutes upon which the CIA relies include, but are not limited to, the CIA Act of 1949;
- (b)(4) exempts from disclosure trade secrets and commercial or financial information that is obtained from a person and that is privileged or confidential;
- (b)(5) exempts from disclosure inter-and intra-agency memoranda or letters that would not be available by law to a party other than an agency in litigation with the agency;
- (b)(6) exempts from disclosure information from personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of privacy;
- (b)(7) exempts from disclosure information compiled for law enforcement purposes to the extent that the production of the information (A) could reasonably be expected to interfere with enforcement proceedings; (B) would deprive a person of a right to a fair trial or an impartial adjudication; (C) could reasonably be expected to constitute an unwarranted invasion of personal privacy; (D) could reasonably be expected to disclose the identity of a confidential source or, in the case of information compiled by a criminal law enforcement authority in the course of a criminal investigation or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source; (E) would disclose techniques and procedures for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law; or (F) could reasonably be expected to endanger any individual's life or physical safety;
- (b)(8) exempts from disclosure information contained in reports or related to examination, operating, or condition reports prepared by, or on behalf of, or for use of an agency responsible for regulating or supervising financial institutions; and
- (b)(9) exempts from disclosure geological and geophysical information and data, including maps, concerning wells.



CIA HISTORICAL STAFF

SEGRET (b)(3) NatSecAct

The Directorate of Intelligence Historical Series

THE MAP INFORMATION SECTION OF OSS AND DEPARTMENT OF STATE, 1941-45

PREDECESSOR OF THE MAP LIBRARY
AND GEOGRAPHY DIVISIONS, OBGI

SECRET

OBGI - 4

July 1971

Copy No. 2 of 3

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the US Code, is amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

GROUP 1
Excluded from automotic

Approved for Release: 2018/06/29 C06729285 SECRET (When Filled In)

	CIA	HISTORICAL PROGR	AM.							
		Custodial Log		-						
TITLE	The Map Information Section of OSS and DDI									
		•	COMPONENT		Office	1				
	Department of State, 194	1-1949	PROJECT	DDI's	Office	1				
VOLUME N			PUBLICAT	ON NO. (if publ		1.				
LOCATION	MAN (Building and room)		COPY -NO.	OBGI-						
		100500 050000		2 OF	3 (b)(3)					
		ACCESS RECORD				-				
	· NAIÆ	COMPO	NENT ·	DATE OUT	DATE BACK					
				-						
			· · · · · · · · · · · · · · · · · · ·							
			•							
]				
			•							
						-				
	•									
			· · ·			-				
·····			<u> </u>		<u>'</u>	∤ '.				
-			· · · · · · · · · · · · · · · · · · ·			1.				
			· · · · · · · · · · · · · · · · · · ·							
						<u> </u>				
	. <i>)</i>		······································	Ę.		-				
•			.: 			-				
•						-				
			······································							
L.										

FORM 9-71 3434 Approved for Release: 2018/06/29 C06729285

C06729285	Approved for Release: 2018/06/29 C06729285 SECRET	
		(b)(3) NatSecAct
	. WILL DO AT MICHODICAL CEDIES	
	THE DD/I HISTORICAL SERIES	
	OBGI - 4	
•		
•	THE MAP INFORMATION SECTION OF OSS	
-	AND DEPARTMENT OF STATE, 1941-45	
PREDECESSOR	R OF THE MAP LIBRARY AND GEOGRAPHY DIVI	SIONS, OBGI
•		
	<u>5</u> .y	(b)(3) CIAAct
•		(b)(6)
-	July 1971	
		(b)(3) CIAAct (b)(6)

. HISTORICAL STAFF
CENTRAL INTELLIGENCE AGENCY

John Kerry Kijng
Director
Basic and Geographic Intelligence

Contents

				Page
I.	Prev	war and Early World War II Milieu		1
II.	War	time Developments and Activities		S
	Α.	Start of the OSS Map Collection	•	S
	B.	Map Procurement		9
	C,	Catalog Development and Collection Maintenance	•	15
	D.	Microfilm Episode		25
•	E.	Application of Maps and Map Data to the Problems of War and Peace	•	28
	F.	Role of MAPIS in the OSS Outpost System		39
III.	Org	anizational Framework and Resources		46
	Α.	Organization		46
	B.	Budget		51
	C.	The People and the Times		52
	D.	Buildings Occupied		60
IV,	End	-of-the-War Milieu	. •	63
	Α.	Map Mop Up in the Wake of Hostilities	•	63
	В.	Change and Uncertainty		68
V.	Com	mentary		7 5
	Α.	Map Intelligence: The Grand Design		75
	В.	Problems		80
	C.	Accomplishments		83

			Page
		Appendixes	
Α.	. Chrono	logy: 1941-45	86
В	. Staff o	of the MAPIS, February 1942 Through ber 1945	93
C.	Arthu	ations on the Times, Mainly by r H. Robinson, October 1941 gh December 1945	95
D.	. Glossa:	ry of Abbreviations	104
· E.	Source	References	106
	•	Illustrations	
Fi	igure 1.	Organization of the Research and Analysis Branch, Coordinator of Information, 1941-42	2
Fi	gure 2.	Organization of the Research and Analysis Branch, Office of Strategic Services, 1943-45	4
Fi	gure 3.	Map Catalog Card Used in the Map Information Section, 1942-43	17
Fi	gure 4.	Map Catalog Card Introduced in 1944 .	18
Fi	gure 5.	Map and List Fragment Illustrating the Area Breakdown System	20
Fi	gure 6.	Requests Per Month for Maps and Related Data Handled by the Map Information Section, 1942-45	30
Fi	gure 7.	Organization of the Map Information Section, OSS, as of September 1943.	47

		<u>P</u> :	age
Figure 8	Organization of the Ma Intelligence Section OSS, 1945	,	48
Figure 9	Organization of the Ma Division, IRIS, Depar of State, November 19	rtment	50

- iv -

THE MAP INFORMATION SECTION OF OSS AND DEPARTMENT OF STATE, 1941-45: PREDECESSOR OF THE MAP LIBRARY AND GEOGRAPHY DIVISIONS, OBGI

I. Prewar and Early World War II Milieu

The Map Library and Geography Divisions of the Office of Basic and Geographic Intelligence (OBGI)* are direct descendants of organizations that originated during World War II. The wartime demand for maps and map collection accelerated the development of map information units that gradually broadened the scope of their functions to deal with geographic problems as well. story begins in July 1941 when President Roosevelt appointed William J. Donovan as Coordinator of Information to correct obvious intelligence deficiencies. 1/** Donovan's advisors, mostly academicians of some stature, worked out a plan for a research and analysis group 2/ along the lines indicated in Figure 1.

^{*} For a glossary of abbreviations see Appendix D.

^{**} For serially numbered source references see Appendix E.

By October 1941 the Research and Analysis staff under the direction of James P. Baxter (soon replaced by William L. Langer) had increased to 200. 4/ The geographic components, the main concern of this history, were staffed, and work started in the Cartography Section in October 1941, in the Geographic Reports Section in November 1941, and in the Map Information Section (MAPIS) on 1 February 1942. 5/

In June 1942 the Coordinator of Information (COI), a civilian agency, became the Office of Strategic Services (OSS), a military agency responsible to the Joint Chiefs of Staff (JCS). 6/ A major reorganization effective in January 1943: restructured the Research and Analysis Branch (R and A) around four regional, interdisciplinary divisions and four service or semifunctional divisions as indicated in Figure 2 The Geographic Reports Section ceased to exist. The geographers who had staffed it were distributed among the regional divisions with most of them going to the Europe-Africa Division. 8/ The January 1943 organization scheme lasted with only minor changes to

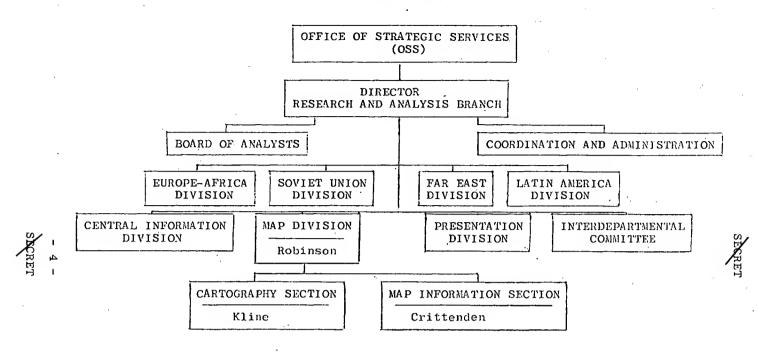


Figure 2. Organization of the Research and Analysis Branch, Office of Strategic Services, 1943-45 7/

Approved for Release: 2018/06/29 C06729285

the end of the war. When it was implemented, Richard Hartshorne moved up to the offices (member of the Board of Analysts, among others) in the structure around the Branch Director. Arthur H. Robinson became Chief of the newly formed Map Division, and Leonard S. Wilson, Former chief of the MAPIS, became deputy chief of the Map Division. Robinson's former position as Chief of the Cartography Section was taken by H.V.B. Kline, and Charles V. Crittenden became Chief of the MAPIS. 9/ Later significant changes within the scope of this history involved the addition of two sections, Topographic Models (March 1943) and Special Photography (June 1943), to the Map Division. 10/

The Geography and Map Library Divisions of OBGI of 1970 are direct descendants of the Map Information Section. 11/ The short-lived Geographic Reports Section had functions akin to those of the present day Geography Division, and some of the thinking which led to the Joint Army Navy Intelligence Studies (JANIS) program, predecessor of the National Intelligence Survey (NIS) program, originated in this unit. 12/ Also, there was some postwar

- 5 -SECRET carryover of ideas from the Geographic Reports
Section and successor groups to the predecessors
of the Geography Division of today through people
(Jay S. Seeley, Lois Olson, 13/ Frank Stedman, 14/
and others) who worked in both. There was also
some postwar carryover of problems from the Geographic Reports Section. At least questions
regarding the nature of geography and the role of
geographers in intelligence that were much discussed in and around the Section in the period
1941-42 15/ were still being weighed in only
slightly different frames of reference in the
postwar years. 16/

Following Pearl Harbor and the entry of the United States into the war in December 1941, the demand for maps in US official circles skyrocketed, and the organization and expansion of the geographic units of COI generally accelerated. 17/ Although some of the basic maps required were available, the number of hard copies on hand fell far short of meeting needs. A competitive scramble for maps arose. 18/ The shortage was aggravated by the fact that many of the early wartime map users knew little

about sources of supply, coverage likely to be on hand, comparative quality of different maps of the same area, and possibilities and limitations of different methods of reproduction. Naive requests taxed the overworked staffs of all major map collections. 19/ The map shortage changed somewhat in degree and nature as the war progressed, but deeply influenced planning and thinking in the MAPIS until the end of hostilities. 20/

In advance (1941) planning, the Map Information Section was thought of as a clearing house for information about maps and their availability. 21/As COI/OSS operations broadened, the activities of the Section expanded, sometimes in directions quite far afield from the original concept. 22/ Making an inventory of the foreign map resources available in the United States was a key part of the early work. This involved surveying major map collections and microfilming parts of them. 23/ Requests for maps were filled by borrowing from or reproducing items in established collections, especially the Army Map Service, Library of Congress, Department of State, and American Geographical Society collections. 24/

- 7 -

II. Wartime Developments and Activities

A. Start of the OSS Map Collection

During the early months of its existence,
the Section operated under an order which enjoined
its leaders against starting a map collection.
This directive originated with Richard Hartshorne,
then Chief of the Geography Division (see Figure 1),
and quite likely reflected his concern about possible clashes with the map collecting efforts of
the service agencies. 25/

As the tempo of war work stepped up, it became evident that an OSS map collection would have to be formed and authorization for this was duly granted on 17 August 1942. 26/ One of the considerations that carried weight in the collection argument was the obvious need (by mid-1942) for a depository for the maps assembled as compilation sources by the Cartography Section and as research sources by the Geographic Reports Section. Without a depository, source maps had to be discarded after use, even though it was evident that some would be needed again.

Cartographic effluvia from research and compilation jobs and the negatives of maps in other collections which had been photographed to fill requests formed the initial core of the OSS map collection. 27/ From this modest start the collection grew rapidly as arrangements were set up to receive on automatic distribution all new production of the Army Map Service, US Navy Hydrographic Office, AAF Aeronautical Chart Service, Department of State, and other agencies, The arrangements with the Army Map Service (AMS) also provided for the delivery to the Map Information Section of two copies of each British original obtained by AMS under Anglo-American mapping agreements. 28/ The output of the OSS Cartography Section was stocked and distributed and, as the war progressed, became an increasingly important part of the map goods readily available in the bulging wooden cases of the Map Information Section, 29/

B. Map Procurement

The 1942 procurement effort was directed mainly toward the collection of catalogs, coverage

indexes, and other finding aids from domestic sources 30/ rather than the maps themselves. As the demands that would be placed on the Section and the newly authorized OSS map collection became clearer, procurement took on new meaning and importance. 31/ Early procurement efforts were directed mainly toward exploiting fully all possible domestic sources. 32/ These included business firms with foreign operations, bookdealers specializing in foreign publications, and private citizens willing to make their map holdings available. Many of the latter were reached through a nationwide radio appeal by General Donovan. 33/

Wartime procurement was not simply a matter of obtaining newly published maps from accessible sources. It also involved the screening and rescreening of collections in government libraries and offices for maps, some quite old, which the march of events had invested with new importance. In this category were the maps and charts of little-known Pacific islands and many maps of Japan and China. There were some significant finds, for example, several hundred 1:50,000 topographic maps of Japan found buried away in a Department of Agriculture vault. 34/

- 10 -

The desirability of searching books and periodicals for significant maps was recognized early 35/, but the manpower and linguistic skills required for a major effort on this were never available.

The MAPIS became (1943-44) the focal coordinating point for all OSS map procurement. Before this principle was established, there were instances where sources were bothered repeatedly by map seekers from different OSS components. There were also cases where valuable maps obtained by individual components were not called to the attention of the OSS community as a whole. The cone-place procurement concept was at first (26 January 1943) applicable only to the Research and Analysis Branch 36/, but was later (27 February 1943) applied to all of OSS. 37/ A special order of 6 July 1944 38/ reasserted the centralized procurement principle and made it broadly applicable to OSS overseas installations.

The MAPIS' first steps in the field of direct foreign map procurement were taken in 1942 and comprised exchange agreements with the British Inter-Service Topographical Department (ISTD) and Naval

- 11 -

Intelligence Division 5 (NID 5). 39/ From the end of 1942 onward, direct OSS map procurement from foreign official sources was a touchy matter. Such procurement was desired and encouraged by the R and A and Map Division leaderships, but the authorization for it under existing directives and agreements was cloudy 40/ and remained so throughout the existence of OSS.

had conducted some direct foreign procurement before the war, mainly through military attaches, and was anxious to maintain a position in this field. An agreement between MIS, ONI (Office of Naval Intelligence), and OSS signed on 10 February 1943 41/ made the MIS responsible for direct map procurement from official foreign agencies while limiting OSS to direct procurement of maps needed for "immediate operational purposes." The agreement also provided that original maps and charts covering foreign areas obtained by MIS, ONI, and OSS would be forwarded to AMS "for compilation purposes and file, as desired." The new JCS directive to OSS dated 27 October 1943 42/ provided for OSS "Accumulation,

evaluation, etc.... of topographic...information."

In 1945, when the future status of the OSS map collection was being considered, Arthur H. Robinson, Chief of the Map Division, contended that the JCS directive of October 1943 negated the MIS-ONI/OSS agreement of February 1943. 43/ It was unclear whether a decision on this point was reached.

Transfer of the MAPIS to the Department of State on 1 October 1945 made the question academic.

In mid-1944, through the OSS London outpost, steps were taken to coordinate OSS map work still more closely with that of British counterparts. Broad agreements were worked out for the sharing of facilities and services. These improved the status of OSS Map Division representatives in the European Theater of Operations and brought about a mutually beneficial exchange of additional maps including, for the United States, acquisition of thousands of map sheets that had not been obtained by the Army Map Service under earlier US-British agreements. 44/

Despite OSS success in direct foreign procurement activities, the attitude of the MIS and the Army Map Service remained ambivalent. They wanted the fruit of OSS collection efforts and recognized that OSS with special funds and capabilities was in a position to accomplish some things in procurement that the military could not. 45/ Nevertheless, the MIS remained lukewarm toward OSS map procurement efforts and sometimes obstructed them. 46/

In mid-1944, when map mop up procurement in the wake of hostilities was being planned, Arthur H. Robinson summarized the procurement authorization problem with complete candor in a message to the London outpost.

. . . at the present time we are not supposed to procure maps overseas except in the line of immediate OSS operations. We naturally are construing this very liberally, but nevertheless, if it seemed desirable to the Engineers to limit us, I have no doubt that their scruples would be extremely small. It will be necessary, therefore, to enlarge the agreement, or rather to point such an agreement with the Corps of Engineers in a slightly different direction. Being under the JCS, we need not worry about the sanction necessary to prepare maps, but we are in a totally untenable position insofar as procurement is concerned if someone desired to slug us. 47/

- 14 **-**

SÈ&RET

Despite cloudy authorization, direct procurement was conducted on a modest scale at several outposts and plans were developed for more elaborate efforts to be undertaken as permitted by changing military situations. 48/

One of the first extended and intensive map procurement missions to be conducted in the field was that of Capt. John Randall and Sgt. Rodney Martin in the Near East. 49/ They traveled by truck, spent approximately two months in the field (November 1944 to January 1945), and visited all accessible map issuing agencies in Palestine, Transjordan, Lebanon, Syria, Iraq, and Iran. They acquired some 5,000 maps not already in Washington and made arrangements for the acquisition of as many more. The trip and its results in maps and related data were regarded as a success and a model for OSS map mop up missions to be conducted in all areas after the end of hostilities. 50/

C. Catalog Development and Collection Maintenance

Serious weighing of the problems of map filing and cataloging started in the MAPIS in 1942. 51/ The early (1942-43) catalog of the

- 15 **-**

MAPIS comprised cards for each map in the OSS collection and "union" catalog cards for significant maps in other collections. 52/ The typed card (Figure 3) of this early system was designed by Robert Scott who borrowed ideas from the AMS Williams system. 53/ The card presented difficulties; for example, space for data on very complicated maps was insufficient. 54/ Preparation often "bogged down on the typing problem." 55/ A summary of Section activities mentions "struggles with an inadequate catalog card" through mid-1943. 56/

Work on a new catalog card and list of map subjects started in 1943 and continued into 1944. 57/ Also developed in the 1943-44 period was a new area breakdown to be used in setting up the card catalog and in filing maps. Many members of the Map Division contributed to these developments. The resulting checklist card (Figure 4) seems to have been the work of Leonard S. Wilson, Arthur H. Robinson 58/, Charles V. Crittenden 59/, Hibberd V.B. Kline 60/, and George Beishlag 61/. Work on the 35 subject headings (still in use with minor adjustments) was started by Leonard S. Wilson and refined

- 16 -

	EUROPE,	SOUTHERN - DODECANESE ISLANDS	3427					
	TITLE	Dodecanese Islands (Set)						
	SCALE PROJ.	1:25,000						
,	PUB. DESC.	Instituto Geografico Militaire Contours, Roads, Towns, Coastal Features, Drainage, Spot Elevat						
	COLOR REPR. SOURCE	B.W. Photostatic Negative Department of State						
	(980)		·					

Figure 3. Map Catalog Card Used in the Map Information Section, 1942-43

	PUE AUTHOPHY	A-0 NO		CAN				S C R		υ	
	PUE AUTHORITY	A70 NG)	[A.							
	PUB AUTHOPHY	A-0 NO	•	1	·			WITE VILL			
					•						
			DIAGPAN	y	ONE PECE	1	CO1.08	·	9		HOTOSRAPH NES
3 1	SIRAIGHT PARALLES		PICTUPE	1	WOLTIFLE		110NOC~8	OME			PHOTOSTAT NEG
	CUNVED PARALLEIS	1	PHOPILE		561	ř	MANUSCA	ırt		1	POSITIVE
	NO COORDINATES	1	NAMED THE PROPERTY	1	SIPIES		PRESS PL	N		يايسن	HILLIOGRAPHY
		، بنینت دننست	MER HATCH MARKET STATES	رور دورور منها	or fire-trials # & A, Ova	erene.	grass in error	C18 1005	1,111	7 او مالكستر	THE REPORT OF THE PERSONS ASSESSMENT OF THE
1	MILITARY		POWER	. il	CLIMATE	_	SOUS			Щ'	VEGTIN COVER
	Collation	i	Arnounts	·	FISHING -		4		į		Complete
	Administrative Areas	ļ	Lines	1_	GEOLOGY	_			. С.		Incomplete
	Military God	. j	Prants	1	HISTORY	1:	4			 -	WATER SUPPLY I
)N	OIL	i	Types	:	ROADS			-	-		CYAWRSTAW.
Ä	fields	_	PARROADS	1	Bridges	ď	4	-		0.	
	Inpa Lines	ĺ	Bridges .	Į.,	Distances	<u> </u>	-l .				- Depths
ļ.	Reimeries	ļ	Distances	\	Traffic	ļ	-i				Distances
DM.	Strange] Prattic	i	Tunnels	-					Port Facilities
:[PEOPLES		Tunnels	į	Surfaces	1	3	OMMEN			Routes
i	Distribution	į	Linchified	\$		ii				ļ	Fratic
	Ethnology	1	Gauges	1_	MINERALS	Ì	Radio			1	Reviesbility
	Linguistins		Multiple Tracks	1 -	Deposits	- (4			البييا.	Carais
1	Keligians	Ė	Traffic Facilities	1	Mine Locations	[Telepti	one			
		MILETARY Contation Administrative Areas Military Grid OIL fields Inportions Retineries OM. Strange PEOPLES Distribution Ethniclosy Linguistics	MULEFARY Corlation Administrative Areas Military Grid DN OIL fields Inportions Retimeries DM Storage FEOPLES Distribution Ethiclogy Linguistics	MILEFARY POINTERAGE MILEFARY POWER Collation Annuals Administrative Areas Lines Military Grid Prants Types Inpution British Military Grid RATERIARS Inpution British Military Grid Prants Types Inpution British Military Grid Prants Types Inpution British Distribution Linchided Ethniclesy Gauges Linguistics Multiple Traces	MO COORDINATES AFINAL PROTOGRAM MOLETARY POWER Contation Amounts Administrative Areas Unes Military Grid Prants Types Fields PATERCADS Inpo Lines Relimentes Unitances Distribution Lineshined Ethnology Gauges Linguistics Multiple Traces	NO COURDINATES AFFAIL PROTOGRAM SEPIES	MILETARY FOOVER CLIMATE Collation Arounds FISHING Administrative Areas Lines CLEDICCY Miletary Grid Plants HISTORY Types ROADS fields PATH ROADS Bridges Inpo Lines Bridges Distances Relimeres Outstances Traffic PEOPLES Lumels Surfaces Distribution Linchied Other Categories Deposits Ethnicipy Gauges Minigrals Linchied Opposits Deposits	NO COMMONATES AFFAIL PROTOGRAMM SEPIES PROSS FOR	MILETARY	MILITARY	ROCCOPPORATES APMAIL PROFINGARIA SEPTES PRESS PUN

Figure 4.

Map Catalog Card Introduced in 1944. The acute map famine of 1942 (and later) influenced the development of this card which was thought of as a tool for getting the most out of limited map material. Other factors that figured in the development of the card were the special interests of the Joint Chiefs of Staff and limitations of the suppower available for catalog work during the war period.

Approved for Release: 2018/06/29 C06729285

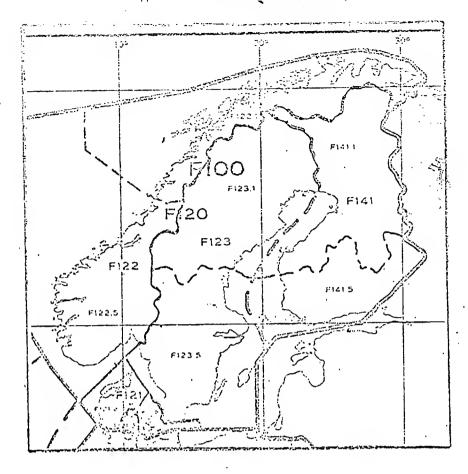
and finalized by George Beishlag. $\underline{62}$ / The area breakdown (Figure 5) was evidently the work of H. David Vernon. $\underline{63}$ /

The new catalog system was introduced in July 1944* with an enthusiastic fanfare that seems quaint in retrospect -- "Only systematic world-wide circulation of map intelligence known to exist." 64/
The catalog was to be standard for OSS, that is, it was to be used in Washington, in the field, and in communications. 65/ The Map Division leadership had hopes (not realized) that the system would develop into a union catalog for government-wide use after the war. 66/

The catalog program was an integral part of Arthur H. Robinson's postwar plan for a permanent Map Division within the Government 67/ and a "world-wide map intelligence system." 68/ Robinson acknowledged that the new catalog was developed late "like most other things." 69/ He believed, however, that, coupled with a system of microfilm

- 19 -

^{*} First distribution of printed cards.



F060	EUROPE
F100 ·	EUROPE, NORTHERN
F120 F120.5	SCANDINAVIA SOUTHERN
F121.2 F121.21 F121.21A F121.21B F121.21C F121.21C F121.21E F121.21E F121.21F F121.21G	DENMARK JYLLAND (JUTLAND) JYLLAND, NORTHERN AALBORG AARHUS HJORRING RANDERS RINGKOBING THISTED (TISTED) VIBORG

Figure 5. Pap and List Fragment Illustrating the Area Breakdown System. This system was introduced in 1944 for the regional filing of catalog cards and maps.

slides (maps on film mounted on aperture cards),
the catalog would give the Map Division or a
successor organization valuable tools for servicing
"the peace conference," 70/ by which was meant
something akin to the Paris Peace Conference of
1919.*

A push to recatalog the OSS map collection on the new system and arrange it physically according to the new area breakdown got underway in the first half of 1944 73/ and picked up momentum in the latter part of the year, Much manpower was allocated to cataloging and card distribution. 74/

^{*} In their thinking about servicing an eventual peace conference, Robinson and MAPIS leaders were influenced by Col. Lawrence Martin, Chief of the Division of Maps, Library of Congress, who took leave from his library post to serve (1944-45) as Robinson's special consultant. Col. (then Major) Martin was one of the four Army officers who assisted the American Commission to Negotiate Peace. 1918-19. 71/ As a geographer, he vividly recalled the role maps played in decisions on territorial problems in the World War I peace settlement. Looking ahead to the post-World War II peace in terms of World War I experience was logical, but seems in retrospect to have been unwise. The world of 1918-19 was vastly different from the technologically advanced bipolar world of 1945-46. In the latter, remote power relationships determined boundaries with little heed to patterns on the ground or maps illustrating such patterns. first hint that this would be so came to the MAPIS from the United Nations organization meeting at San Francisco, April-June 1945, at which the demand for maps and map services was negligible. 72/

A status report on the collection unit prepared in September 1944 notes that:

With approximately 100,000 titles and 550,000 sheets on paper and over a quarter of a million items on microfilm, the Unit now contains one of the three largest collections of maps in the United States. It is without question the most valuable from the standpoint of carefully selected maps useful in strategic military and post-hostilities planning.

The maps are organized and maintained in a File Copy library and a distribution collection. They are filed regionally according to a standardized filing system developed in the Map Intelligence Section which insures rapid and accurate finding or filing of individual maps. 75/

Quality and quantity estimates in the above report seem essentially correct. The remainder of the statement, however, appears to be more an expression of hope than a candid weighing of the situation of September 1944. At the time, the file copy and distribution collections were still much mixed, application of the regional filing system was far from complete, and finding desired maps was a slow and tedious operation. Other collection problems of the period were a serious shortage of manpower for maintenance work 76/ and an acute space squeeze in the map case-bordered halls of the South Building.

In November 1944 the Map Intelligence Section*
moved to the street level floor of the Washington
Auditorium at 19th and E Street, N.W. 78/ This
move started the last lap of the Section's wartime
existence. The new quarters provided much needed
additional space; however, the move and the shakedown in the new space were serious setbacks to map
processing and collection maintenance. 79/ Many
days elapsed before system of a sort emerged from
the chaos and regular work was resumed.

As 1945 were on toward V-E Day, the cataloging of maps continued at a brisk pace, but the backlog was hardly dented. It soon became evident that years would be required to reduce the huge uncataloged accumulation. This was underscored as maps arrived in increasing quantities 80/ from the European Theater of Operations -- gleanings, in part, of the OSS procurement teams that collected maps in the wake of hostilities.

^{*} A Branch-level announcement of the new name "Map Intelligence Section" was requested by Robinson in a memo dated 19 October 1944. 77/

In the spring of 1945, the Army Map Service began pressing for more prompt and complete reporting on maps, especially topographic maps, in the OSS collection. Accession lists and copies of all catalog cards were solicited. 81/ The Army Map Service request was considered reasonable, but the enormous volume of accessions (see below) made it impossible to provide what was wanted with available manpower. 82/ This was of considerable concern to the Map Division and R and A leaders because their inability to comply strengthened the position of the Army Map Service in the competition for postwar status as the "central authority for maps in the government." 83/

V-E Day (8 May 1945) brought a further switch of priority emphasis to the Far East. 84/ It also brought a certain psychological letdown mingled with concern about the postwar future of the Section.

A statement of Section objectives prepared on 6 July 1945 (almost midway between V-E Day and V-J Day) highlights the situation in map processing and collection maintenance that prevailed then and, more or less, to the end of 1945. 85/ [Extracts]

- 24 <u>-</u>

Specific Objectives to be Accomplished in Fiscal Year 1945-46

Catalog and index unprocessed maps: 115,000 titles, 512,000 sheets. Estimated requirements: 33 man-years.

File maps in the Collection Unit: 3,080,000 sheets. Estimated requirements: 20 man-years, 400 additional 5-drawer map cases.

Distribute within OSS and to other agencies who have requested this service, a backlog of 360 packages of catalog cards, averaging 3,600 cards per package: 3,216,000 cards. Estimated requirements: about one man-year (covers also cards which will normally be received during the coming fiscal year).

Specific Objectives to be Accomplished in Indefinite Future

Catalog and index unprocessed maps: 217,000 titles, 1,617,000 sheets, plus normal monthly procurement results after close of 1945-46 fiscal year.

File above listed materials when they reach Collection Unit.

Catalog maps in professional magazines and periodicals.

D. <u>Microfilm Episode</u>

Data on microfilming activity figure importantly in the 1942-45 reports and working papers of the MAPIS. 86/ Microfilm was consistently

- 25 -

pushed by the leadership despite the negative attitude of most map customers who would generally use film only as a last resort. 87/ reasons for the interest of administrators in microfilm were different from period to period and go back, in part, to the don't-start-a-mapcollection directive under which the Section's work was initiated. Microfilm was first thought of as a way of getting around the map collection ban. 88/ Later, it was viewed as a tool for taking inventory of important map collections, especially out-of-town collections. 89/ Still later, microfilm was thought of as the only practical means by which maps in the thousands could be quickly and easily transported to outposts 90/ and away-from-Washington conferences. 91/

In late 1943 or early 1944, when the new map catalog was being developed, the Map Division leadership learned about a then relatively new aperture card system (35 mm film slides mounted on punchcards) and, hearing early wails from the siren song of automation, thought that map slides placed on such cards might effectively supplement the new catalog

- 26 -

and open up a new era in map cataloging and reference. Applying the slide idea to map collection problems was in harmony with the guidance Map Division leaders were receiving from General Donovan and William L. Langer regarding the development of systems that would preserve data collected during the war and make it useful after the war to the OSS, if it were to continue, or to a new central intelligence service. 92/

The slide system idea was passed to the OSS Management Analysis Division for development of a specific plan, but the plan, completed in May 1945 93/, was rejected for budget reasons by the Deputy Director for Administrative Services. 94/

Most of those who worked in the MAPIS during World War II look back on the microfilm program as a costly stopgap of doubtful value or as a complete failure,* views that may not give sufficient weight to overseas use of the film (never adequately evaluated) 96/ and its use in the making of topographic models. 97/

^{*} Wilson in a 1949 article 95/ on the MAPIS devotes two of 13 pages to a somewhat defensive discussion of the microfilm effort.

Failure or otherwise, the MAPIS microfilm effort spoke to some fundamental space and transport problems, especially the problem of providing map services at away-from-Washington points of need. 98/ It can be seen in retrospect that many aspects of the speaking were premature; for example, quick print-out equipment was not available. It is probable, however, that the 1970's will see successful automated systems that incorporate kernels of the maps-on-film idea.

E. Application of Maps and Map Data to the Problems of War and Peace

Service to users of maps and related data started in the Map Information Section early in 1942 in the crisis atmosphere that followed Pearl Harbor. Most of the early requesters were in other parts of the Office of COI (later OSS) and, in general, they knew little about maps, sources of supply, or how best to use available material. 99/The small staff of the MAPIS had to do much elementary explaining and educating.

Throughout the war the requests levied on the MAPIS skipped wildly around the world and

- 28 -SECRET through the spectrum of knowledge. They varied from simple ones that could be filled by distributing an existing COI/OSS map to complex requests that led to the collection of thousands of maps 100/ and sometimes to the compilation of new maps in the Cartography Section. The month-by-month trend of the request load is represented graphically on Figure 6.

many high-level individuals and offices: Executive Office of the President, White House Map Room, Joint Chiefs of Staff, Combined Chiefs of Staff, Office of the Director of OSS (General Donovan), British War Office, Allied Reparations Commission, War Production Board 102/, and Congressman Lyndon B. Johnson. 103/ Between 1942 and 1945, the MAPIS provided maps for key briefings, international conferences (including Roosevelt-Churchill meetings), and major training activities. This was sometimes done under great time pressure with limited manpower. 104/ Several efforts in this category qualify as accomplishments in the application of maps to problems of statecraft. The Section, in

_ 20 _

SÈCRET

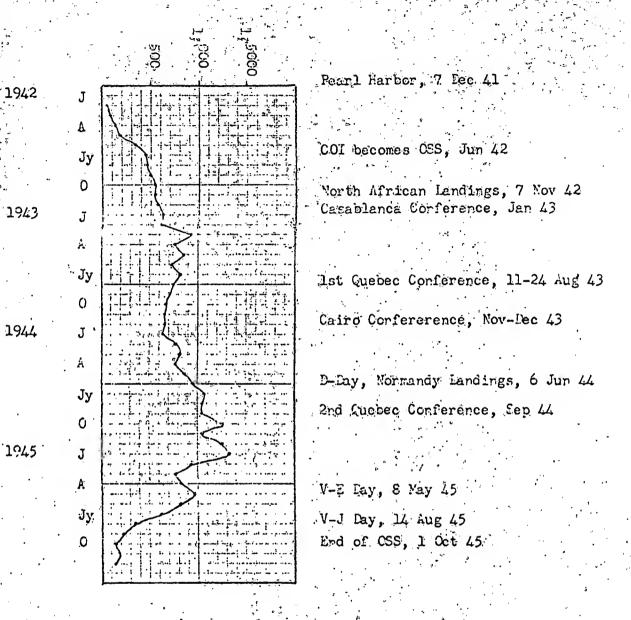


Figure 6. Requests Per Month for Maps and Related Data Hardled by the Map Information Section, 1942-45. 101/

cooperation with the Cartography Section, serviced the Casablanca Conference, January 1943; the First Quebec Conference, 11-24 August 1943; the Cairo Conference, November 1943; the Second Quebec Conference, September 1944; and the United Nations Conference on International Organization,* San Francisco, 25 April to 26 June 1945. 106/

A map collection designed to meet the special needs of the Civil Affairs Holding and Staging Area at Monterey, California, was established by the MAPIS and maintained, mainly by George Beishlag, from February through September 1945. 107/

In the early period of the Section's existence, MAPIS staff members were keenly aware that their reference tools, methods, and facilities were inadequate. They hoped to develop a more organized approach, and eventually did, although the day-to-day pressure of the request load delayed this.

^{*} OSS provided map support at the request of the State Department. The OSS Map Division group of four people worked closely with the State Department geographic advisors headed by Otto E. Guthe. 105/

From late 1943 onward, much thought was given to new kinds of service and in 1944 the keynote became "furnish more than just maps." 108/

A reference unit was established in early 1944. 109/ Its stock comprised atlases, gazetteers, civil division lists, glossaries, and travel guides. The unit fielded many spot questions, especially place-name questions which were numerous and troublesome in gazetteer-starved 1944.

The big change in the work and orientation of the MAPIS came with the establishment of a Regional Intelligence Unit in the Section in late 1944. The planning that led to this was almost exclusively that of Arthur H. Robinson, Chief of the Map Division. His weighing of the related values is made clear in a memo of 18 August 1944. [Italics added]

It is our feeling, after having spent several months in intensive work on the organization and function of map information, particularly in relation to the position we hope this division can hold in a postwar intelligence agency, that the personnel of Map Information is far too low. There are all sorts of phases of research in Map Information which have never been touched and which should definitely be worked on. I would ... make the strong statement that

up to now our Map Information has been but a . . . service. Within two months, I hope that we will have finished the procedures and functions manuals, that the Civil Service will have up-graded the whole Section, that its name will be changed to the Map Intelligence Section, and that it will operate as such. 110/

The late 1944 buildup of the MAPIS was, like the map catalog effort, a phase of Robinson's design* for map work in a permanent, postwar intelligence agency. 111/ Planning along this line seems to have been in complete accord with the guidance Robinson was receiving from his superiors. 112/

A Regional Intelligence Unit** comprising a desk for each major area was established on paper in mid-1944 and by September 1944 some tentative staff assignments had been made. A paper 113/ on the MAPIS prepared in the fall of 1944 notes the following functions of the area desks:

^{*} From mid-1944 onward, this design became increasingly synonymous with the expression "map intelligence."

^{**} Sometimes called the "Regional Research Unit."

- Select maps worth collecting and cataloging.
- 2. Select maps for users (fill the more complicated requests).
- 3. Maintain liaison with appropriate parts of OSS.
- 4. Maintain liaison with major map publishers, for example, AMS, ONI, MID, AND GSGS.
- 5. Plan research and procurement missions to be conducted by or through OSS outposts.
- 6. Prepare map evaluation reports and analytical map bibliographies on areas of regional responsibility.
- 7. Maintain files and conduct research necessary to carry out the above functions.

The follow-through work in late 1944 and early 1945 was in general harmony with the above stated functions, although report production received extra emphasis.

The first products of the Regional Intelligence Unit were analytical index maps showing city-plan coverage available for the cities of Germany, Austria, China, and Korea. 114/ This work started in November 1944 and was completed in December 1944. The maps were prepared to

facilitate the finding of desired coverage and to aid procurement planning by calling attention to cities and towns for which plans were needed. Since the Regional Intelligence Unit evolved into the present-day Geography Division, the index maps could be regarded as the Geography Division's first products.

The main effort on map analysis or map evaluation studies started in late 1944. The expression "map evaluation" appears frequently in data on MAPIS activities during World War II 115/ and has caused observers who arrived on the scene after the war to wonder what was referred to and why it received so much emphasis.

In the early war years, a map that had been "evaluated"* was, for practical purposes, one that had passed the scrutiny of someone who had at least a little know-how on foreign maps. In a milieu in which map knowledge was spread on thin 116/ and the demand for it was high, this elementary

^{*} Criteria included publisher's reputation, compilation methods, sources used (if known), purpose underlying construction, and dates.

evaluating eliminated many slips and errors. It did not catch all errors; for example, occasional use was made of old sources for compilation when much better ones of later date were available, but it served a purpose in a time of map famine. Later, as map supplies improved and as familiarity with foreign maps became more widespread, "map evaluation" lost some of its wartime meaning and significance, although it is still a valid concept.

Since the world is still imperfectly mapped 117/, there are today and may always be situations in which the fine-point evaluation of maps is important. Generally speaking, however, these are fewer and less troublesome than they were during World War II because the evidence (including returns from remote sensing systems) now available for comparison and checking is much better and more plentiful.

The first map evaluation study by the Regional Intelligence Unit (completed in January 1945, distributed in March 1945) 118/ was R and A 2863, (JANIS 77) Analysis of Maps on Southeast Coast of China -- Kwangtung and Hainan. This study and

- 36 -

issued first as provisional R and A reports and later in the format of Chapter XV, <u>Gazetteer and Map Appraisal</u>, of the JANIS. <u>119</u>/ Also completed in preliminary form in January 1945 was R and A 2845, <u>Critique of British</u>; <u>Polish</u>, <u>Russian</u>, and <u>American Maps of the POLISH-RUSSIAN Borders</u>, a study requested by the White House map room. Seven other map evaluation reports were in progress in the Regional Intelligence Unit in January 1945. <u>120</u>/

Other early products were lists of map sources ("target lists") prepared to guide map procurement after the cessation of hostilities. Preliminary lists for Germany, Austria, Hungary, Czechoslovakia, Romania, and Yugoslavia were completed in January 1945. 121/

The following map evaluation reports, in addition to the two noted above, were completed before the end of hostilities: 122/

R and A	JANIS	Completed 1945
2840	75 Evaluation Report or Maps of M	1
2847	73 Analysis Maps of S eastern S	South-
•	- 37 -	

R and A	JANIS	. <u>C</u> c	ompleted 1945
2996		The Geodetic Basis of German Car- tography	May
2882	150	Evaluation Report on Maps of Borned	June
2881	1 5 3	Evaluation Report on Maps Covering the Area From Java to Timor	August*

Other map evaluation reports completed in

1945 included: 123/

R and A	. <u>Com</u>	pleted 1945
3001.1	Analysis of Germany City Plans	August
3192	Analysis of Selected Maps of Ceylon	August
3179	Evaluation of Maps of North China	October
2974**	Evaluation of Map Coverage for Zone of the Straits (Dardanelles)	November .

^{*} A preliminary edition may have been sent to the field before the August completion date.

^{**} The Dardanelles project reflects a postwar State Department interest. 124/ All other projects noted were started or planned before the end of hostilities.

The MAPIS leadership saw map evaluation reports as a bridge between the growing map collection and researchers and planners who needed maps. In the milieu of 1944-45, much map compilation work and military planning related to the Far East was underway. 125/ Map evaluation studies prepared in the MAPIS were well received by map specialists and planners engaged in these activities. 126/ V-J Day, however, brought sharp changes. Mapping programs were canceled or cut back, and the real market for detailed map evaluation studies evaporated. This is now clear in retrospect, but in late 1945 it was not immediately evident.

F. Role of MAPIS in the OSS Outpost System*

From mid-1943 onward, much MAPIS effort centered on the organization, staffing, and support of Map Division components of OSS outposts. 129/

^{*} OSS at various times established outposts outside Washington -- in the United States, in the theaters of operations, and in other areas. Outposts were under a Strategic Services Officer or Chief of Mission and many included R and A components. In at theater of operations, the Strategic Services Officer was responsible both to the theater commander and to the Director of OSS. It was the duty of the Strategic Services Officer to maintain appropriate liaison with the military and OSS field units in his own and other areas. 127/ Dual responsibility and the varying, often negative, attitudes of theater commands toward OSS activities caused many difficulties. 128/

Map Division outposts were established to support military operations and OSS field activities by supplying maps, map service (for example, on-the-spot cartography, plotting work, and preparation of overlays), and models as required, and to collect for local use or transmittal to Washington maps and map data from field sources. 130/Some of these outposts were large and very active, whereas others were small, one- or two-man operations. 131/In theory, each outpost was a Map Division in microcosm using methods identical to those used in Washington. 132/

Map Division outposts functioned at one time or another at Algiers, Bari, Berne, Cairo, Caserta, Chungking, Honolulu, Kandy, Kunming, London, New Delhi, Paris, Rome, and Wiesbaden (Biebrich). 133/The scope, nature, and duration of the work in these places varied greatly.

London, with a peak Map Division staff of 65 and a terrain model capability, was by far the largest and most important outpost. 134/ Many members of the MAPIS served tours at London. Leonard S. Wilson, the Section's first chief, organized the

London outpost and directed it through most of 1944. 135/ Noteworthy achievements of the London outpost included negotiation of map exchange agreements with British agencies 136/ and unusual success in finding and making use of scarce local resources (personnel, supplies, and equipment). 137/ The London outpost's most glamorous coup was "crashing the gate" at No. 10 Downing Street to present maps and gazetteers for use in Winston Churchill's map room. 138/ Churchill's appreciation of the map service was evidenced by letters to General Donovan.

The Algiers outpost, headed by Hibberd V.B.

Kline and later by Robert West, was vital at one
stage of the war. Much important map work was done
there in support of the invasion of southern France,
an operation in which the OSS had a major role. 139/

The outpost at Kandy, Ceylon, the first Map
Division outpost established, was directed by
Richard Newsham. Map work was done for several OSS
detachments operating in Southeast Asia and later
for General Wedemeyer. The small staff, usually
two people in addition to Newsham, handled "enough
. . . work for 5 or 6 people." 140/

- 41 -

Map Division work in Chungking evolved differently from that at other outposts. Map procurement had first priority and operational support cartography did not develop into a major activity. Procurement was conducted very effectively by Floyd Masten and Paul Wong despite a tangled theater command situation and other difficulties. 141/

Robinson's broad plan for government "map intelligence" envisaged continuation of Map Division activity after the war in one organizational framework or another (military, State Department, or an independent OSS-like agency). 142/ In overseas activities, as in other spheres, building a structure that would carry over into the postwar era took precedence over other considerations, except where this markedly militated against current conduct of the war. 143/

A sizable two-way traffic in maps was maintained between Washington and the outposts, 144/ a traffic which could be pointed to as the main achievement of the outposts in relation to MAPIS interests. In early 1944, movement of maps was

- 42 -

SECRET

mostly one way, Washington to the outposts, but by mid-1944 the flow was preponderantly to Washington* from the outposts, as shown below:

Copies of Maps and Related Publications Transmitted 145/

	$\frac{\text{May}}{1944}$	November 1944	September 1945
From Washington to Outposts:	7,000	8,500	2,400
From Outposts to Washington:	250	3,000	85,000

The indicated movement of maps was not a simple thing. Communications between Washington and the outposts caused endless difficulties. 146/ Under war conditions, messages, maps, and shipments of supplies and equipment were often delayed, misdirected, or completely lost. For example, a microfilm camera consigned to London ended up on Omaha Beach in France and a terrain model requested by General Wedemeyer in the Far East was en route for more than nine months. 147/ Shipments of maps and related data from the field to Washington were also

^{*} Reflecting a shift from field service activities to map procurement.

delayed and misdirected. The frustration common at both ends of the communication lines generated many vitriolic letters and memoranda. 148/

A key factor in disagreements and misunderstandings between Washington and the outposts was the slowness of communications. Cables took three days and traffic was sharply limited by quotas and restrictions. Memoranda took at least two weeks. Staying "in channels" (clearing multisubject messages through several desks) meant additional delay. 149/

The difficult task of coordinating Map Division outpost affairs (administrative and professional guidance, correspondence, procurement of equipment and supplies, personnel processing, cargo shipments) was first handled along with other duties by Arch C. Gerlach and later by Leonard H. Dykes 150/ and Robert M. Coffin.*

As the war drew to a close, outpost activity phased over from cartography and local map supply to

^{* &}quot;I have just taken over the job of Outpost Officer for the Map Division, which is a job created by the devil, a tornado, and an egg beater." 151/

field procurement of maps and related data. 152/
The procurement teams that moved into newly liberated areas included people who had been at outposts for some time and others sent out from Washington in 1944 and 1945 after periods of training
in the Map Division. Much preparatory work and
planning for procurement missions was handled in
the MAPIS. 153/

Many, if not a majority, of those who served at outposts believed they were inadequately supported by headquarters. Washington functionaries, for their part, thought that some outpost people had exaggerated notions of the importance of their activities in the whole pattern and insufficient understanding of the limited manpower and resources available in Washington for servicing requests. 154/

The dominant impression given by many surviving papers dealing with Map Division outpost activity is that of tired, dedicated people pressing too hard with no opportunity to back off and weigh their work objectively. 155/

III. Organizational Framework and Resources

A. Organization

In 1942, when the staff numbered eight people, various short-lived regional-functional responsibility arrangements were in effect in the MAPIS. 156/
From these evolved an organizational scheme shown in Figure 7 which lasted until the latter part of 1944. In the fall of 1944, a general reorganization took place. The various changes were spread over a period of several months and were not officially consummated until January 1945. 158/ These changes led to the pattern indicated in Figure 8 which, except for the elimination of the microfilm unit in June 1945, lasted until 6 November 1945.

Following the demise of OSS on 1 October 1945, the Map Division, less two parts previously assigned to Army, was attached along with most of the R and A to the Interim Research and Intelligence Service (IRIS) of the Department of State. The expectation was that a more formal relationship with the State Department would become effective on 1 January 1946, at which time IRIS would cease to exist. 160/ The

- 46 -

SECRET

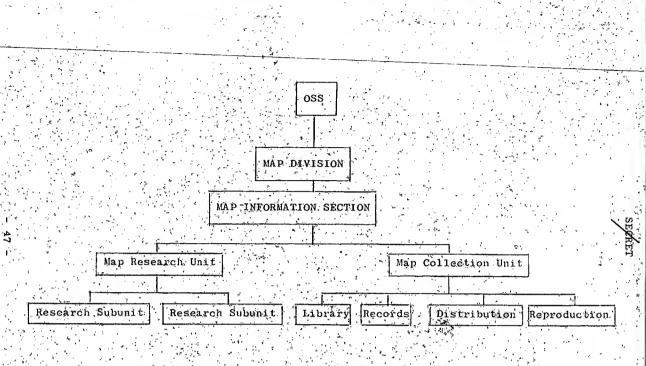


Figure 7. Organization of the Map Information Section, OSS, as of September 1943 157/

Approved for Release: 2018/06/29 C06729285

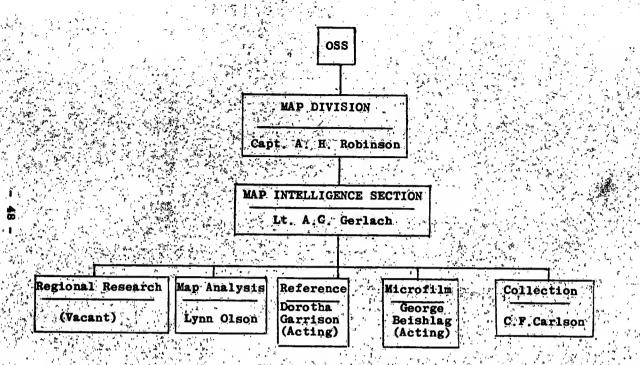


Figure 8. Organization of the Map Intelligence Section OSS, 1945 159/

Approved for Release: 2018/06/29 C06729285

first step toward the new era was taken on 7 November 1945 when Robinson in his last major administrative move reorganized the Map Division as indicated in Figure 9. The most significant feature of the new arrangement was the division of the wartime MAPIS into two entities: the Map Library Section and the Map Intelligence Section, the latter comprising the Regional Intelligence Unit of the wartime MAPIS. With this change, the three main geographic components — Map Library, Map Intelligence (now Geography), and Cartography — achieved form and status roughly comparable to that which they retain in 1970 as CIA divisions.

Robinson planned to resign on 31 December 1945, and the merger of the Map Division, IRIS, State, with the State Department's Division of Geography and Cartography was anticipated effective 1 January 1946. 163/ The changes of 7 November 1945 were discussed prior to announcement with Otto E. Guthe of the Division of Geography and Cartography, who became chief of the new merged entity.

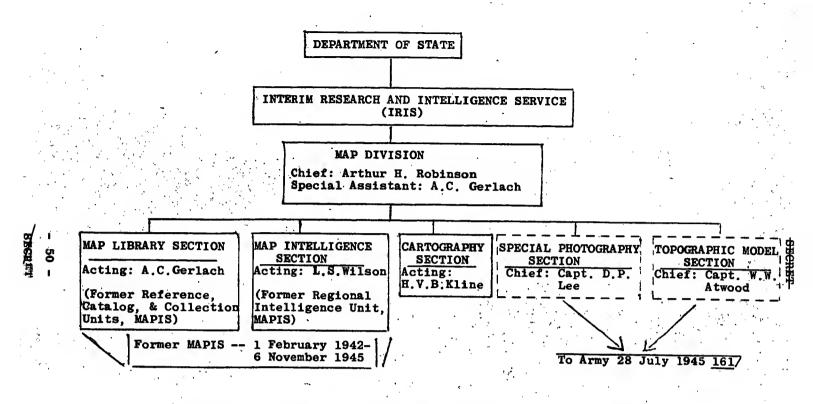


Figure 9. Organization of the Map Division, IRIS, Department of State, November 1945. 162/

Approved for Release: 2018/06/29 C06729285

B. Budget

In June and July 1945, after considerable juggling and shifting, the following figures were arrived at for the personal services (salaries) category of the Map Division budget for the 1945-46 fiscal year. 164/

Map Division Administrative Office: \$29,900.00
Map Intelligence Section: \$80,087.30
Cartography Section: \$85,000.00
\$194,987.30

Map Division funds for other budget categories

(1945-46) probably did not exceed \$55,000. 165/

These figures include no funds for the Topographic

Models and Special Photography Sections which were

transferred to the Army Map Service on 28 July 1945. 166/

Budget estimating in mid-1945 was complicated by the mixed military*/civilian personnel roster. 167/Military personnel assigned to the Map Division were paid by the War and Navy Departments and their compensation was not reflected in Section budget estimates. Other factors that complicated budget making in mid-1945 were uncertainty about future activities

^{*} Of some 33 MAPIS people on duty in Washington in July 1945, six to eight were military.

and organizational arrangements, pending pay legislation, anticipated in-grade raises, and uncertainty
regarding the postwar plans of individuals in the
upper pay grades. Nevertheless, the above figures
give a rough indication of the cost of operating
the Map Intelligence Section.

C. The People and the Times

The staff of the MAPIS that started work in early 1942 came mainly from the teaching profession, reflecting the fact that the prewar domain of American geography was almost exclusively academic. 168/Later, people with different backgrounds joined the staff, including graduates direct from the campus and people who had worked for private firms and other government agencies before joining OSS. A background profile of the staff is provided by a summary prepared on 26 September 1945 169/

Educational	Qualifications	
Ph.D.		10
M.A.		. 8
B.A.		16

Work Experience	
University teaching	8
Teaching at other levels	5
Map work with other government agencies	4
· Commercial geography	1

- 52 -

SECRET

Civil Service Classifications*	
P-7	1
P-6	2
P-5	3
P-4	8
P-3	4
P-2	5
SP-7	1
SP-6	3
SP-5	11
CAF-5	6
CAF-4	3

The group was comparatively young and full of enthusiasm for the task. Its members had a purpose, a challenge, a market for their product, a budget, an opportunity to put ideas into effect, and a feeling that they were in on the ground floor of something destined to grow and become important. 170/
This was heady wine for those who had matured during or shortly before the depression and were no strangers to limited job opportunities, irregular paychecks, and the restricted horizons of the 1930's.

The main morale problem was an almost endless three-point squeeze between increasing demands of requesters for service, limited work and file space, and high echelon demands for tighter security. 171/

^{*} Includes several people overseas at outposts; the MAPIS staff on duty in Washington seldom numbered over 35.

Minor irritants included all of the standard wartime frustrations: mixed up routing, unreliable local transportation, shortages of supplies and equipment, and elaborate justifications required for everything from installation of home telephones to supplemental gasoline rations. 172/ On the whole, however, morale remained good throughout the war. Win-the-war zeal and unity of purpose were important factors, and good prospects for foreign travel (tours of duty at outposts) did the spiritual tone no harm. 173/

After the Office of the Coordinator of Information, a civilian agency, was transformed into the Office of Strategic Services under the Joint Chiefs of Staff at the end of June 1942, an effort was made to get into uniform those members of the MAPIS staff who met military qualifications. On 10 September 1942 five men (Scott, Olmstead, Thoren, Foster, and Wilson) indicated their interest in obtaining commissions 174/ and at least four of them eventually became Naval Reserve officers.

In a 3 July 1943 letter, Leonard S. Wilson, then Deputy Chief of the Map Division, noted that he had been commissioned recently as a Lieutenant (j.g.) in the Naval Reserve and that "this place is being rapidly militarized." 175/ As the war progressed, the draft brought into the services a number of people with qualifications in geography and mapping, and it became possible to seek out such people and sometimes bring about their assignment to the MAPIS. 176/ Questions such as: Shall we try to obtain a commission for X? . . . Can we retrieve Y if he is inducted? . . . Should we seek Z who is now a private at Ft. Ord? . . . absorbed much administrative time and effort. 177/

When military personnel were detailed to the MAPIS, their duties were given civil service equivalent ratings reflecting peacetime professional qualifications rather than military rank. Thus: 178/

			Civil Service	
			Ratings of	Approx.
	Status		Duties	Pay
George Beishlag	Army	T/4	P-4	\$2,276
Arthur P. Biggs	Army	Pfc.	P-3	1,988
E. Willard Miller	Civ.	-	P-4	3,800
Earl Brown	Civ.	_	P-3	3,200
Grace Steward	Civ.	-	P-3	3,200

There was some unfairness in these arrangements.

The officers and civilians were adequately paid, whereas some enlisted men doing identical work were paid less.

The leadership of the MAPIS comprised Leonard S. Wilson, founder and first Chief, February 1942 to January 1943 179/; Charles V. Crittenden, Chief, January 1943 to June 1944 180/; Clarence W. Olmstead, Acting Chief, July 1944 to December 1944 181/; and Arch C. Gerlach, Chief, December 1944 to November 1945 182/. Fred W. Foster was assistant chief in 1943 183/, as was Burton W. Adkinson for the period October 1944 to August 1945 184/.

considerable control over the MAPIS was exercised (especially in 1942) by Richard Hartshorne, Chief and organizer of the COI/OSS Geography Division, 1941 to January 1943, and later assistant director of the Research and Analysis Branch. 185/
None of the above individuals, however, had a more profound influence on the Section than did Arthur H. Robinson, Chief of the Map Division, January 1943 through 1945. Robinson laid down the main plans and policy lines; the Section leadership followed. In 1944, after Crittenden departed for Europe, Robinson wanted to hire a well-known geographer with an established reputation to head the MAPIS 186/, but was unable to make the desired connection and the job eventually went to Arch C. Gerlach.

- 56 -

geography at the time of their OSS work, except Robinson and Olmstead who acquired doctorates after the war. Many members of the leadership group had known each other before the war at universities. The influence of the University of Michigan, represented by Wilson, Crittenden, Olmstead, and Foster, was particularly strong in the MAPIS. 187/ Gerlach and Adkinson, natives of Washington state, became acquainted at the University of Washington where they both earned graduate degrees. 188/

Richard Hartshorne, a prestigious professor of geography at the University of Wisconsin, was brought into the COI milieu in 1941 at the recommendation of Preston James, the first geographer to join COI. A geographic theorist of some stature, Hartshorne had a major voice in planning COI/OSS map and geographic services and in selecting personnel. 189/

Arthur Robinson, a Hartshorne protégé, was in some respects the most dynamic member of the leader-ship group. He was only 28 at the time he became

Chief of the Map Division in 1943. As Division Chief, Robinson exercised strong control over the Map Information, Cartography, Topographic Models, and Special Photography Sections. He saw these four components as an integrated whole, 190/ and for this whole he was the philosopher, catalyst, spark plug, and articulate spokesman. A colleague who worked with him closely during World War II described him in 1970 as "calm, steady, reasonable, remarkably fair . . . extremely well suited to the job to be done." 191/

Leonard S. Wilson, the first Chief of the MAPIS, guided the unit during its formative period, 1942-43, before serving as Deputy Chief of the Map Division and later head of the London outpost. 192/Wilson's London outpost work elicited many unsolicited expressions of commendation. 193/ A dedicated believer in the importance of maps to statecraft, Wilson built the Map Information Section from scratch and developed ideas and concepts that are still in use. 194/ He was an effective negotiator 195/ and planner and, if sometimes carried away by his own enthusiasm, was innovative and willing to try new ways and means.

- 58 -

Charles V. Crittenden, who followed Wilson as Chief of the MAPIS, was in charge of the Section during the long pull, 1943-44. 196/ He had much to do with the planning of map services for outposts and international conferences 197/ and, on the whole, did a commendable job under unfavorable circumstances. 198/ A hard, detail-minded worker, Crittenden was somewhat preoccupied with professionalism. 199/ During the last year of the war, he effectively conducted a delicate map procurement mission in spy-ridden Switzerland. 200/

Arch C. Gerlach, who directed the MAPIS from late 1944 through 1945, shared the enthusiasm of his superiors for the application of maps and geographic data to statecraft and implemented their ideas under difficult circumstances. 201/Fair, good-humored, and willing to listen, Gerlach handled thorny end-of-the-war problems with realism and foresight. 202/ If he was overly sanguine about the postwar market for map evaluation studies, he made up for it as an organizer 203/ and astute judge of talent.

- 59 -

SECRET

Fred W. Foster served effectively as assistant chief in 1943 before departing for outpost duty in London and eventually France, where he conducted map procurement in the wake of hostilities. 204/

Clarence W. Olmstead came to the MAPIS highly recommended. 205/ He served in many roles and filled in capably as Acting Chief between Crittenden and Gerlach. 206/ Olmstead spent the end-of-the-war period overseas handling map information at the London outpost. 207/

Burton W. Adkinson functioned for almost a year (1944-45) as assistant chief of the MAPIS handling personnel, JANIS contributions, map procurement, and liaison work. Robinson, who regarded Adkinson highly, said in 1945, "I would have no question about placing him in a position of great trust." 208/

D. Buildings Occupied

The Map Information Section started in 1942 with one man (Wilson) occupying part of a room in the South Building, one of the main buildings in a

COI/OSS-occupied complex of permanent and temporary structures in the vicinity of 2430 E Street, N.W. 209/The Cartography Section had occupied space in the South Building since 1941.

The restructuring of the Research and Analysis Branch in January 1943 established the Map Division comprising the Cartography and Map Information Sec-These two units and the Division Chief's (Robinson's) office, all in the South Building, formed a rather closely knit map operation with good liaison and cooperation between the parts and close contact with other OSS offices nearby. Establishment within the Map Division of the Topographic Model Section (March 1943), housed in the Ford Theater, and the Special Photography Section (June 1943), housed in the National Archives, did not alter the unity of the South Building core. Physical unity lasted until the Cartography Section moved to the National Archives in the fall of 1944, a move preceded and followed by involved discussions regarding the space needs of the Map Division, 210/

Following Cartography Section's exodus from the South Building, the MAPIS moved in November 1944

to the ground floor of the Washington Auditorium at 19th and E Streets, N.W. Getting the MAPIS settled in the Washington Auditorium workspace was difficult. A Robinson memo of 1 January 1945 notes that:

only part of the area to become available in the Washington Auditorium has been released . . . 2/5ths of the map collection is easily accessible . . . 1/5th is in another part of the Auditorium, and the remaining portion . . . is in the garret of the South Building. 211/

The move to the Washington Auditorium seems, in retrospect, to have been most unfortunate for the MAPIS and it was certainly ill timed. Adjustment (December 1944 and January 1945) to the new workspace slowed and limited service to customers 212/at a time of peak demand (see Figure 6).

The two groups into which the MAPIS split in November 1945 remained at the Washington Auditorium until the end of 1945, cutoff date for this history, and for several years thereafter.

IV. End-of-the-War Milieu

A. Map Mop Up in the Wake of Hostilities

Upper echelon OSS thinking about a postwar central intelligence service 213/ found expression on the Map Division level in Arthur H. Robinson's design for postwar "map intelligence" in the Federal Government, 214/ This design called for, among other things, an intensive, across-the-board (all types of maps considered) map procurement effort as hostilities ended. 215/ Such an effort was considered desirable in order to make the most of unique, end-of-the-war opportunities for collecting maps -- opportunities that might never again be duplicated. It was believed that an effective map mop up in the wake of hostilities would aid the war effort by bringing to attention quickly maps that were still of operational interest, 216/ fill critical gaps in US map holdings, 217/ and yield much intelligence that would be useful in peacemaking and policy planning. 218/ Implicit, if not directly stated, was the hope that the resulting accumulation of maps would serve as a foundation

for postwar "map intelligence," broadly interpreted, in an existing government department or in a new,

OSS-like intelligence agency.

Thinking and planning along the above lines started in 1943 and influenced development of the Map Division's role in the OSS outpost system, 219/ but follow through on the plans was not all smooth sailing. One of the key problems was the legal basis for OSS map procurement activities 220/ (see Chapter II-B). Ironically, the strongest prop under OSS' somewhat tenuous legal authorization for end-ofhostilities map procurement came from agreements with the British Military Survey Directorate (MSD) -supreme mapping authority for the European Theater of Operations -- rather than from US military agencies. These agreements (noted previously on page 12) recognized OSS as a collector of maps in the field and provided for exchange of duplicates and mutual assistance. 221/ Another problem was the possibility that military clearance requirements (especially Army G-2 Documents) might make it difficult to move maps from military zones to OSS in . Washington, 222/ This threat, viewed with alarm in the Map Division in March 1945 223/, evidently did not become an acute problem.

- 64 -

Map Division field men started work in France in 1944. They worked directly with various missions and also with special search forces attached to Army groups. The maps and map materials obtained soon amounted to several thousand pieces a month. Additional thousands of maps came into OSS hands through MSD. Thus, by capture, purchase, and exchange, map acquisitions from the European Theater of Operations were averaging about 35,000 a month in March-April 1945. 224/

The procurement effort became especially productive as the military front moved into Germany.

OSS map teams arrived at the Justus Perthes plant in Gotha while the city was still partly occupied by German forces. The map stocks were intact. Company officials were interviewed, and nine tons of maps and publications were removed. The same collectors examined the holdings of the German Foreign Office in Berlin, the Abteilung für Kriegskarten und Vermessungswesen im Generalstab des Heeres

(Division for Military Mapping and Surveying in the General Staff of the Army), and many other agencies. 225/

- 65 -SECRET Each European country presented different problems and opportunities for end-of-the-war procurement and required a somewhat different approach. Plans were amended constantly to get teams to the right places at the right times. In the European supply vacuum of 1945, judiciously dispensed gifts and services could and did bring to light many maps and map collections that would not have otherwise come to the teams' attention. There were, however, many setbacks and disappointments. 226/

In Africa, the Middle East, and the Far
East, many different approaches were used in endof-the-war procurement depending on military developments and on the degree, if any, to which
normal government controls and procedures had been
affected by hostilities. Contact with universities
and libraries initiated through letters of introduction was sometimes effective, also exchange for
US publications, exchange for commodities or services, and direct purchase from originating agencies
and local dealers. 227/ Confused theater command
situations were often more of a brake on procurement
activity than the restrictions of indigenous governments. 228/

Although the OSS map procurement effort in the wake of hostilities was conducted in the name of the Map Division, the MAPIS had a major role in Many of the people (Demetra Aeton, Lloyd Black, it. Charles Crittenden, Fred Foster, Clarence Olmstead, and Conrad Thoren) 229/ active in the field phase were experienced members of the MAPIS staff in Washington. Other field procurement people were trained in the MAPIS before going overseas. preparation of both groups was directed toward filling gaps in the OSS collection. 230/ As the ultimate depository of more than a million of the maps gathered 231/, the MAPIS and successor organizations were influenced for years by the end-of-the-war collection effort. In perspective, the Section's contribution to this effort appears to be one of its finest achievements. Many of the maps acquired (for example, maps of the USSR obtained from Germany) are still (1970) earning their keep as items of intelligence value.

In 1945 OSS/Army discussions regarding the Army Map Service's claim to unique topographic maps in the OSS collection, Col. A.G. Matthews, Chief of

the Military Intelligence Division, Corps of Engineers, admitted that the OSS had done a better end-of-hostilities map procurement job than the AMS. 232/ Considering the source and the circumstances, this was not faint praise.

B. Change and Uncertainty

By early 1945 supplies of maps available in Washington had improved considerably, reflecting three years of wartime production by US agencies, materials obtained through US/British agreements, and the growing trickle (soon to become a flood) of maps acquired after the war-ended.

The change from map famine to feast brought new problems which MAPIS could not handle adequately with available manpower. 233/ It was impossible to keep the map catalog abreast of the intake of new titles. Uncataloged maps piled up and overflowed available space 234/ making a farce of "regional filing." These problems were exacterbated by the difficulties of adjusting to the new workspace in the Washington Auditorium. 235/

MAPIS were hard to lay down amid the uncertainties of the spring of 1945. A key puzzle of the period was whether or not V-E Day would be followed by a lengthy campaign in Asia. Such a campaign was considered a strong possibility in early 1945, and much Map Division planning was pointed toward it. 236/

Arthur H. Robinson, looking ahead more to peace than to war, considered the outlook "not good" in June 1945. 237/ He noted that the Corps of Engineers was gaining strength; the Division of Geography and Cartography of the State Department considered itself in a very strong position with respect to peace work; and the Division of Maps of the Library of Congress was planning a postwar expansion. He also observed that "... we are a War Agency and have no postwar standing. On the other hand, we can see a great gap and can take positive steps to do something about it..." 238/

The Engineers had already started their "positive step" toward the postwar era. In March 1945 AMS claimed a legal right to all unique topographic maps at scales larger than 1:1,000,000 in

the OSS collection. 239/ The legal aspects of this move involved the interpretation of various agreements and JCS directives (see page 12). Side issues related to whether OSS had or had not cooperated in letter and spirit in making available accessions lists, pouch lists, and catalog cards to AMS. 240/ The pressure for accession data was somewhat unfair since the AMS spokesmen knew that maps were being received in both the MAPIS and the Army Map Service in quantities so great that they could not possibly be accessioned quickly by the available manpower. 241/

behind the AMS move to bid for "postwar control of foreign maps and map intelligence in the United States Government." 242/ The challenge became a paramount Map Division concern and remained so through most of 1945. At one point (September 1945), the AMS was actively preparing for the physical takeover of the OSS map collection. 243/ These preparations were called off when the Map Division became part of the Department of State in October 1945 244/, but apprehensions continued into 1946. 245/

The explosion of atomic bombs in 1945 at Hiroshima (6 August) and at Nagasaki (9 August) brought V-J Day (14 August) considerably sooner than had been generally expected, 246/ In the MAPIS the end of hostilities was the focus of attention; big-picture unknowns of the new atomic era were contemplated fleetingly, if at all, 247/ There followed a period of uncertainty regarding the fate of OSS, uncertainty which was finally resolved by an Executive Order of 20 September 1945 announcing that, effective on 1 October 1945, OSS would cease to exist. 248/ Parts were assigned to the War Department and parts, including the Research and Analysis Branch and thus the Map Division*, were assigned to the Interim Research and Intelligence Service (IRIS) of the Department of State. In the wake of V-J Day, assignment of the MAPIS to the State Department had been no cer-The Army, as noted above, had anticipated tainty. that the Section would come under its aegis. 250/

^{*} Less the Topographic Models and Special Photography Sections assigned to the Army in July 1945. 249/

The period from V-J Day to the end of 1945 was characterized by a sharp drop in morale (the win-thewar purpose that had united efforts before August was no longer operative) 251/; disappointment* regarding the dissolution of OSS, a structure built over four dedicated years 253/; uncertainty regarding postwar map work in the IRIS or under other organizational arrangements 254/; resignations resulting in part from tightened budget and personnel ceilings 255/; and a diversion of interest to the outside job market and private undertakings. 256/

The leadership faced planning problems which were complicated by conflicting, fast-changing estimates regarding the nature and scope of future activities. 257/ The settlement of financial accounts was also demanding 258/, as was the fending off of map librarians and private geographic researchers seeking OSS maps. 259/

^{*} Disappointment was general throughout OSS, but was felt most acutely in the higher echelons. Ford 252/effectively summarizes reasons for the abrupt end of OSS (the death of President Roosevelt was an important factor) and some of the big-picture implications.

Robinson, in his last major administrative move, on 7 November 1945, divided the wartime MAPIS into two entities: Map Library and Map Intelligence. 260/ This division reflected, among other things, the decline in war-oriented requests and the fact that the high-level customers served during the war were no longer requesting service. In commenting on the change, Robinson observed on 20 November 1945 that it "will assist in our future organizational requirements, but does not actually affect the work of the Division very much." 261/

In November 1945 John K. Wright of the American Geographical Society asked Robinson a number
of questions regarding geographic work underway in
IRIS. Robinson, in one of the last major messages
he prepared as Chief of the Map Division, answered
in some detail and in doing so prepared a valedictory of sorts. 262/ It is significant that, in
his answers, he differentiated sharply between the
"map work" of the Map Division and the "research on
geographic problems and areas" underway in the R and A
(IRIS) regional branches. Robinson indicated that
the research on geographic problems "appears to be

quite closely intergrated with other disciplines."
He also noted that:

the greatest amount of research is being carried on in the field of map intelligence, so termed for lack of a better word. . . . This work consists of the analysis and evaluation of published maps usually organized around the coverage of a particular area . . . [and]. . . research . . . concerning the organization, plans, policies, equipment, etc. of foreign map agencies and institutions.

. . . the largest single block of geographers working as a unit (the Map Division, OSS/IRIS) is now in a state of suspension so far as its future responsibilities are concerned; the Division of Geography and Cartography of the Department of State is in a similar position; the Library of Congress [Division of Maps] has not yet been able to acquire the necessary funds or personnel for any post war expansion; the production of joint geographical publications such as the JANIS studies is almost suspended at this time and a decision has not yet been reached as to the future of that work, 263/

V. Commentary

A. Map Intelligence: The Grand Design

The United States had not been in World War II long before officials in the wartime intelligence agencies began to think about the future. General Donovan's first ideas regarding a permanent peacetime intelligence service called for its development within the military establishment. By 1944, however, he had decided that the kind of central intelligence service he believed necessary could function effectively only as an independent organization directly under the President. 264/

OSS components were encouraged to develop for their special fields plans and ideas for possible postwar organization of US intelligence activities. Arthur Robinson led the Map Division effort along this line and, for better or for worse, tied his thoughts together with a thread called "map intelligence." Under this theme, he built up a rationale for the continuation in peacetime of most of the wartime activities of the OSS Map Division. 265/ Speaking off the cuff at an 8 August 1944 conference, Robinson said:

We are trying . . . to establish . . . the principles upon which any size organization could be built, and we are trying to make it a world-wide map intelligence system, doing away with Map Information -- make it Map Intelligence. When that is finished, the cataloging program is just a start, when we've done that, the limits of Map Intelligence will be dependent upon itself. It can go anywhere it pleases. 266/

The thinking of the Map Division leadership (mainly Robinson's thinking) about what map intelligence could and should be was summarized in a 11 November 1944 paper titled "The Establishment of Foreign Map Intelligence for the Federal Government." 267/ Although many of the examples and frames of reference in this paper now seem quaint and dated, some of the basic ideas set forth had and are still having an impact on the US intelligence effort, for example, the suggested interdepartmental approach to foreign map procurement. In later (1945) refinements of his thoughts, Robinson emphasized study of the mapping programs of foreign countries for what they might reveal

about capabilities and intentions, a function still sound in theory and potentially important. * 268/

A substantial part of the activities that Robinson thought of as falling within the scope of "map intelligence" carried over from OSS to the postwar intelligence structure where they have shown staying power despite verbal confusion that has long kept and still keeps the edges of "map This confusion seems to have intelligence" hazy. started in 1944 when Robinson first linked "map intelligence" with his continue-after-the-war hopes for the OSS Map Division, 269/ Subconsciously or otherwise, the map intelligence banner was stretched and stretched again to cover an ever-widening circle of functions, types of data, activities, bodies of knowledge, and methods. illustrate, the interpretations noted below were

^{*} Some worthwhile findings have been arrived at since World War II but, unfortunately, data required from the two countries of primary interest—the USSR and Communist China—have seldom been available (1950-70) in sufficient depth to support significant conclusions:

gleaned from memoranda, letters, reports, and statements prepared in the MAPIS and elsewhere in the Map Division from mid-1944 through 1945.

Map Intelligence is

Information about maps and mapping

A map catalog system

Data retained in a map catalog system

Data presented on or taken from maps

Intelligence of general value that happens to be presented in map form

Reference materials pertaining to maps and mapping

The practical application of cartographic science and the implications thereof

The activity of sifting, evaluating, and analyzing maps

A phase of intelligence on foreign countries

By November 1945 Robinson himself was a little concerned about the vagueness of "map intelligence."

In a 20 November 1945 letter he said:

The greatest amount of research is being carried on in the field of map intelligence, so termed for the lack of a better word. It might appropriately be called cartology as opposed to cartography. 270/

The map intelligence concept was given prominence in January 1946 when it became the name of a State Department division (the Division of Map Intelligence and Cartography), which included a Map Intelligence Branch, 271/ predecessor of CIA's present-day Geography Division. "Map Intelligence" was retained as a branch name following the transfer of the Division of Map Intelligence and Cartography to CIA in December 1947. It was not eliminated until April 1951 when, after some experimental juggling of branch arrangements 272/, the Map Intelligence Branch of the Map Division of the recently dissolved Office of Reports and Estimates (ORE), became the Analysis Branch of the Geographic Division, Office of Research and Reports (ORR). 273/ It then became common to refer in official statements to "geographic and map intelligence" rather than to "map intelligence" alone, 274/

At present (1970), "map intelligence" is generally looked upon as a subphase of "geographic intelligence." 275/ Nevertheless, the map intelligence interest core which Robinson identified during World War II remains a valid concept that must be taken into account when the whole spectrum of US foreign area intelligence is outlined.

B. Problems

The most fundamental problem faced by the wartime MAPIS and units doing similar work was identification of the scope and content of map/geographic intelligence and placement of this field of inquiry within evolving national plans for intelligence coverage. This problem was never neatly solved. Wartime measures that spoke to it were temporary expedients and, although the expedients influenced the form of the more permanent organizational arrangements adopted immediately after the war, the resulting decentralized scheme (or lack of scheme) for the handling of map/geographic intelligence has never been completely above argument. 276/

Major problems of theory and organization that demanded attention near the end of the war were quite far removed from the milieu in which the MAPIS made its modest start in February 1942. The key problem of the early period was meeting with limited resources and manpower an unprecedented demand for maps. 277/ The staff that addressed itself to this problem had had much to learn about

maps and more to learn about Washington's competitive intelligence scene.* Experience in
both spheres was acquired quickly and sometimes
painfully.

In the early period of the MAPIS' existence (1942-43), the question of whether plans should be for "war only" or should look to a continuation of activity after the war was largely a back-of-themind problem for Map Division leaders, ** but by

^{*} The problem of fitting OSS facilities and functions into fields fenced and jealously guarded, if not fully cultivated, by the Army and Navy was a persistent one encountered by most OSS components. In facing this problem, the MAPIS fared somewhat better than other units. Fairly good day-to-day working relations were maintained with the Army Map Service and the US Navy Hydrographic Office throughout the war 278/, yet beneath the surface equanimity, there was disagreement on a number of fundamental These concerned OSS retention of unique topographic maps, legal authority to conduct direct foreign procurement, mixed military reactions to Map Division field activities, military review (threatening confiscation) of maps collected in the field by OSS in the wake of hostilities, and end-of-thewar demands for catalog cards and accession lists, demands that could not be met with available manpower. The final problem was an AMS bid to take over the OSS map collection in 1945. Rightly or wrongly, Map Division leaders saw the various AMS moves and demands as competition for postwar status as the "central author- . ity for maps in the Government." 279/

^{**} It was a major concern for the higher echelon as evidenced by General Donovan's proposal for a permanent peacetime intelligence organization submitted to the Joint Chiefs of Staff in the fall of 1943. 280/

mid-1944, this question was being aired openly in a "look beyond the war" frame of reference. A Robinson memo of August 1944 notes that:

We here are trying to do a two-way job, i.e., the immediate operational work as well as trying to plan enough for the future so that the whole business will not go up with a big bang when the war is over. . . I do not wish to see . . . work wasted. 281/

While the Section's long-range future was being considered, services to requesters continued at a brisk pace. Map demand was not spread out evenly. Requests for maps for major conferences, briefings, and training activities often came on short notice at inopportune times and required the whole staff to work overtime servicing them. 282/

Day-to-day cares related to the sheer bulk of paper handled, communications with outposts, recordkeeping, limited work space, shortages of supplies and equipment, inadequate and overworked reproduction facilities, fast growth with rapid personnel turnover, and a continuous battle between war hawks who wanted to get things done and prewar civil-service types preoccupied with regulations, fixed procedures, and copies in triplicate. 283/

- 82 -

Map famine in relation to demand, the key problem at the outset, metamorphosed in the spring of 1945 into a plethora of maps and a declining number of requests. Bulk shipments of captured maps from war theaters outstripped processing capabilities, overflowed available work and storage space, and made a mockery of map-finding aids. 284/

The main end-of-the-war problem was uncertainty about the future of the Section and the peacetime government market for map/geographic work. This contributed to a sharp drop in morale, speeded the departure of experienced help, and shifted the interest of personnel to prospective jobs in the academic world and research in support of work on higher degrees. 285/

C. Accomplishments

The OSS made a lasting impact on US intelligence through the stimulus it gave to the use of scholarly techniques in intelligence analysis. 286/

The MAPIS' main role in this was, in simple terms, application of the techniques and values of geography to the selection of maps for particular

war purposes. If this function was a modest one, the number of times it was exercised was not. From 1942 to 1945, the MAPIS serviced nearly a million requests for maps and related data. 287/ Among the customers were individuals and groups representing the highest policy levels: Executive Office of the President, Joint Chiefs of Staff, Combined Chiefs of Staff, and White House Map Room. 288/

The Section was the only place in wartime
Washington where planners and researchers of all
grades (their number was legion) could get the word
on nearly all classified and unclassified US-published
maps as well as many foreign maps -- for example,
British (classified and unclassified) or other Allied
products. If the Section had done nothing but perform this information-center function, it would have
earned its keep. 289/

In doing its wartime job, the MAPIS worked out some principles that still apply to the handling of maps for intelligence purposes. Important among these was the concept of centralized procurement whereby one component contacted foreign and domestic map sources on behalf of the whole agency rather

- 84 -

than having sources troubled repeatedly by map seekers from many units. (This concept now has a good measure of government-wide application although, initially, it applied only to OSS). 290/

The MAPIS greatly increased map resources at the disposal of government agencies, staked out the map needs of a major intelligence organization, developed catalog and file methods that are still in use, and got required quantities of some 10,000 OSS-produced maps to places where they were needed. Formats and techniques for adapting maps and map data to specific areas and problems were developed and applied. 291/

At the end of World War II, maps were appreciated and used in the United States as tools of statecraft in ways they had not been before the conflict. The map work of OSS, including that of the MAPIS, contributed significantly to this cartographic "coming of age."

Appendix A. Chronology: 1941-45

- Office of the Coordinator of Information (COI) established by Presidential Order under direction of William J. Donovan. 292/
 - Oct 41 Cartography Section, a component of Geography Division, Research and Analysis Branch, COI, activated under direction of Arthur H.

 Robinson. 293/
 - Nov 41 Geographic Reports Section, a component of Geography Division, Research and Analysis Branch, COI, activated under direction of Edward A. Ackerman. 294/
 - 7 Dec 41 Pearl Harbor attack.
 - 8 Dec 41 US entry into World War II.
 - 1 Feb 42 Map Information Section, a component of Geography Division, Research and Analysis Branch, COI,
 activated under direction of Leonard
 S. Wilson. 295/

- 86 -

June 42

Office of Strategic Services (OSS), a military agency, established by military order of 13 June (effective 30 June) as successor to Office of the Coordinator of Information (COI), a civilian agency. William J. Donovan became director with command responsibilities for agency as a whole. 296/

17 Aug 42

Map Information Section (MAPIS) authorized to establish and maintain paper map collection. 297/

23 Dec 42

Joint Chiefs of Staff directive confirmed independent status of OSS and clarified responsibilities in certain fields; rivalry with service agencies mitigated somewhat. 298/

Jan 43

Research and Analysis Branch reorganized; Map Division established
under direction of Arthur H. Robinson.
Leonard S. Wilson became Deputy Chief
of Map Division; Charles V. Crittenden
became Chief of Map Information
Section. 299/

- 87 -

Jan 43 Casablanca Conference 300/; maps and related service provided by MAPIS and other Map Division components. 301/

Feb 43 MAPIS remained open from 8:15 A.M.

until 11:00 P.M. to make better use of
available space and permit longer
period of servicing map requests. 302/

Agreement signed by MIS, ONI, and
OSS making MIS responsible for direct
map procurement from official foreign
agencies while limiting OSS to direct
map procurement for "immediate operational purposes." 303/

Feb 43 A Donovan directive made MAPIS the coordinating component for all OSS map procurement. 304/

Mar 43 Topographic Models Section added to Map Division. 305/

Joint Intelligence Studies Publishing Board (JISPB) established to
direct publication of Joint Army-Navy
Intelligence Studies (JANIS), vehicles
for coordinated intergovernmental basic

- 88 -

27 Apr 43 (Cont'd)

intelligence. 306/ JISPB became important MAPIS customer and MAPIS later contributed to JANIS, 307/

Jun/Jul 43

Special Photography Section added to Map Division. 308/

Jun/Jul 43

Visible files set up in MAPIS for maintaining running inventory of OSS-produced maps. 309/

11-24 Aug 43

First Quebec Conference; maps and service provided by MAPIS and other Map Division components. 310/

Oct 43

MAPIS moved (from second floor) to more adequate quarters on third floor of South Building. Division offices and Cartography Section also located on third floor. 311/

. 27 Oct 43

Joint Chiefs of Staff directive
gave OSS authority to operate on
European continent; OSS became accepted by European Theater of Operations Command Staff as it had not
been before; thenceforth, a new productive working partnership with the

- 89~-

27 Oct 43 (Cont'd)

British developed. Led to conclusion (20 Jun 44) of new mutually beneficial US/British map exchange agreements. 312/

Nov/Dec 43

Cairo Conference; maps and service provided by MAPIS and other Map Division components. 313/

Jan 44

Base maps supplied to outposts for use as reporting tools. 314/

Feb 44

Valuable map accessions began arriving from outposts. 315/

Jun 44

"Map intelligence" first used in a monthly report; outpost desk established. 316/

6 Jun 44

D-Day, invasion of Europe --Normandy landings.

16 Jul 44

Clarence W. Olmstead became Acting Chief of MAPIS replacing Charles V. Crittenden who stepped aside to prepare for overseas assignment. 317/

Jul 44

First general distribution of "new system" map catalog cards; nautical chart microfilm slide collection completed. 318/

- 90 -

Sep 44 Second Quebec Conference; maps and services provided by MAPIS and other Map Division components. 319/

Nov 44 Regional Intelligence Unit activated in MAPIS. 320/

Nov 44 Map Information Section name changed to Map Intelligence Section.

Map Intelligence Section and Map Division Chief's office moved from South Building to Washington Auditorium, 321/

1 Dec 44 Arch C. Gerlach became Chief of MAPIS. 322/

Jan 45 Peak month of service in wartime
history of MAPIS; 1,320 requests for
maps and related information handled. 323/

Feb 45

Map Intelligence Section established
map collection serving Civil Affairs

Staging and Holding Area in Monterey,

California. Collection maintained
by MAPIS personnel (mainly George

Beishlag) through September 1945. 324/

12 Apr 45 Death of President Franklin D. Roosevelt.

- 91 -

Apr 45 Peak month of activity in production of map evaluation reports;

13 reports "in progress." 325/

7 May 45 VE-Day.

14 Aug 45 VJ-Day.

1 Oct 45 End of OSS; MAPIS assigned to
Interim Research and Intelligence
Service (IRIS), Department of
State. 326/

Nov 45

Last reorganization under Robinson;

MAPIS, IRIS, Department of State

divided into two sections: Map

Library and Map Intelligence. 327/

31 Dec 45 Robinson resigned as Chief of

Map Division; end of IRIS, Department

of State. 328/

Appendix B. Staff of the MAPIS, February 1942 Through December 1945.* 329/

Burton W. Adkinson Asst. Chief 1944-45 Desrae Allen Alvina S. Anderson Graziella (Lola) Asselin Walter Bailey (a) Calvin Beale George Beishlag (a) Arthur P. Biggs (a) Lloyd D. Black (a) Joel C. Booth Earl F. Brown H. Bates Brown Thomas Burke (a) Arthur L. Burt (a) James Calderwood (a) Carl F. Carlson Kathryn Cole Frederick H. Crawley Charles V. Crittenden Chief, 1943-44 William C. Culp (a) Elizabeth Day Viola Dodson Leonard H. Dykes Frances Ferry Eric Fischer Demetra A. Foster (nee Aeton)

Fred W. Foster (a) Asst. Chief 1943 Dorotha J. Garrison Arch C. Gerlach (a) Chief 1944-45 Arlene M. Gerlach Thomas Gorman Jackson E. Guernsey (a) John Heath Peter F. Held Mattie M. Hodges James A. Huffman (a) Alfred Jonas (a) Ethel H. Joseph Ann Kuchta Yvette LeSage David Kai Fu Loa (b) Vivian I. Logan (nee Francis) Helen Martin Kathryn McConley Ruth McCreary William J. Mettenet (a) E. Willard Miller Ruby S. Miller Justine Moore Evelyn Morton Eleanor S. Nealley Helen Noren

* This list is believed to include the names of most of the people who worked full time for the MAPIS for substantial periods, 1942-45. Employees of the Registry Office (housed with the MAPIS but attached to the Map Division administrative office) are included but are not differentiated. Many members of the Armed Forces trained in the MAPIS for periods ranging from a few days to several months before serving overseas at outposts. Their names are included if they were in the Section long enough to be noted as employees in available records.

(a) In Armed Forces during all or part of period of

service.
(b) Now in Communist China, 330/

_ qå _

Martha M. Ogilvie
Clarence Olmstead (a)
Acting Chief 1944
Catherine M. Olson
(nee Groverman)
Lynn Olson
Pauline Palmer
Addie G. B. Pougher
Walter I. Prideaux
George H. Primmer
John W. Reith (a)
Joseph M. Roberto
Martha L. Roberts
Oswald Schmidt
Robert F. Scott
Robert M. Smith

Thomas R. Smith (a)
Margaret Starnes
Yetta Sternfeld
Grace Stewart
Louis B. Thomas
Conrad J. Thoren (a)
H. David Vernon
Mary Vranesch
Betty Weethee
Leonard S. Wilson
Chief 1942-43
Dep. Chief, Map Division 1943-45
Krances Winger
Norma Zimmerman
Raymond Zint

Appendix C. Observations on the Times, Mainly by Arthur H. Robinson, October 1941 through December 1945. 331/

The main chronological file of the Map Division and its COI/OSS predecessor includes many bits and pieces of trivia that mirror the times in which the MAPIS was born and matured. The dated fragments below are drawn mainly from the statements and observations of Arthur H. Robinson, who was on the scene in one capacity or another from October 1941 through December 1945; a few are from other sources.

1941 12 DEC. I know of no other place in Washington where any kind of map of any part of the world can be constructed quickly.

15 DEC. Bob Voskuil just homed in as a drafts-

1942 12 FEB. ...rumor that I was receiving the unheard of figure of \$6,000 for my efforts. Let me put it this way. I am earning it, but I'm not getting it.

13 MAR. Night shift... 16 hours of drafting per day is practically mandatory.

7 APR. Col. Martin suggested that you stretch your long legs around Honolulu and see what maps you can scratch up.

16 APR. Mr. Leonard S. Wilson
Chief, Map Information Section
Geographic Division
Coordinator of Information
Washington, D. C.

- 95 ⇒ SECRET

Dear Leonard:

So you are just another one of these birds collecting maps of foreign lands. I wonder how many organizations in Washington D. C. are doing that. It has been rather surprising in these last few weeks the terrible amount of duplication in just this one aspect of the war effort. A bird from one of the organizations cleaned me out of most of my maps of the Far East. There have been other letters and now yours comes along.

I have wondered many times in recent months just how intelligent our Intelligence Service is in this country. I sincerely hope that the Coordinator of Information will get down to the very important point of insisting that there will be coordination. Just now I fear that it is everyone for himself and the devil take the hindmost.

No I am not mad, but I do feel, as do many other people here, that some order needs to come out of chaos. Maybe, or perhaps I should say assuredly, Leonard S. Wilson, Chief, Map Information Section, Coordinator of Information, will achieve this desired goal.

Cheerio! It was awfully good to hear from you anyhow. Good luck in the new job.

[Signed]
John B. Appleton*
Director, [Northwest Regional Council]

* Appleton later joined OSS and was in 1944 Chief of the Geographic Sub-Division of the Far East Division, R and A, wherein, it may be assumed, he learned quickly that the fingers of government are many and "everyone for himself and .. devil take the hindmost" was not necessarily limited to the first six months of World War II.

21 APR. I found suitable accommodations within 48 hours . . . rents are naturally somewhat higher than they are in Chicago, but not any higher than for poorer accommodations in Northfield, Minn.

22 APR. ... there was an insufficient supply of film.

24 APR. The sooner you arrive the better ... we are swamped with requests.

5 AUG. Draft Board Number 18 Ninth Ave. School Columbus, Ohio

Attention: Mrs. Carroll, Clerk

Dear Mrs. Carroll:

A short time ago I received my reclassification by the board and I note that it is III-A. The general understanding here is that III-A now means ...

14 SEP. I am rather doubtful. As you may know, such things as retirement, war bonds, etc., as well as the terrific costs here, make one's normally high salary go a surprisingly small way.

29 OCT....one copy each of the maps obtained from Wendell L. Willkie be delivered to this section when reproductions have been completed.

6 NOV. We will be most happy to have you back with us. We probably will be able to circumnavigate some of the horrible red tape necessary for appointment, but I can't promise that.

16 NOV. So far as draftsmen are concerned, I hesitate to hire men any more. One might almost say that regardless of the training, if the ability is there and it has skirts, it can get a job.

26 DEC. They have agreed to furnish a guard for the room, but ... determination of who shall enter ... should ... rest upon some specially designated person who would know the names and faces of everyone leaving and entering the room at all times.

1943 15 JAN. Washington is a rather congested place, high in price, and meatless, coffeeless, and transportationless. Can't you visualize the desert?

5 FEB. ...copies will number in triplicate somewhere around 1,000 sheets and, while we will be more than glad to supply you, it would be well to weigh your requirements carefully. This request will be a tremendous load on our photostating facilities which are already overworked.

1 MAR. We have vacancies for draftsmen, cartographers and map librarians. If you think she could do any of this work, we will probably hire her. On the other hand, if she is strictly school teacher material as indicated by her residence at ----- Teachers College, we had better not take her.

19 APR. On other occasions, Mr. Spencer and I have been obliged to taxi over to the Pentagon on urgent official business, because cars promised the previous day did not arrive on schedule. Although I realize the motor pool has many problems, I feel

22 APR. Blackout curtains. Enclosed is the statement for 26 yards of blackout cloth at \$1.35 per yard.

24 JUN. Let us know of any changes in your situation. We will try to have a place for you in uniform or out.

18 AUG. You reveal a perplexed and frustrated state of mind. You must remember, however, that any personnel action, civilian or military, that involves more than one office moves very slowly, and that we must follow procedure carefully.

30 AUG. ORDER FOR DRAWING READER SENT TODAY. DELAYED WHILE OBTAINING PRIORITY.

31 AUG. ORDER AGAIN DELAYED BY PRIORITY. EXPECT TO MAIL THURSDAY.

27 SEP. The wheels of the Navy grind slowly, so I have no way of knowing when the request for your assignment will reach your outfit.

7 OCT. This is to confirm our telephone conversation ... in which you allowed Pvt. K. leave from drill on Wed. 6 Oct. 1943.

16 OCT. Since I do not know when I'll be called for active duty, I'd like to have my paychecks and war bond deductions handled as before.

21 OCT. I feel you have an exaggerated opinion of the living conditions here ... that article in LIFE you referred to probably is the single worst piece of sabotage that has hit the war effort.

29 DEC. Like the priority problem, this apparently is one of those things about which no one can do anything. So far as we are concerned, stamp the maps anything you please, but don't ask us to justify it. We aren't interested, nor will we ever gripe about it.

1944 12 JAN. The Map Information Section is much the same except for the usual increase in the work load ... it is almost impossible to get personnel.

29 FEB. Your cable was "answered". In some strange way the reply prepared here was garbled until it was unintelligible and to make things perfect was sent to Cairo. [instead of London]

29 FEB. ...outpost office ... shipping room for Standard Brands or something.

24 APR. ...hereby resign my position ... to accept a commission in the United States
Naval Reserve.

5 MAY I'd say the social life in this city is neither as glamorous nor as hectic as the press would have the rest of the country believe. There are many cultural advantages, many friendly people, and also many lines and crowds.

25 MAY ... shoe coupons for Pfc. Gallos.

7 JUN. ...nine extra trips from my home to work ... 153 miles...send me sufficient gasoline coupons to take care of this additional mileage....

11 JUL. The Map Division is not protesting such a transfer, but sincerely advises that you return to duty here as soon as you are convinced that the WASP program is a dead issue.

21 AUG. Apparently it is your impression that Washington is all sweetness and light, while you in the theater [overseas] experience nothing but frustration day in and day out. Perhaps you have forgotten Washington. Perhaps you have forgotten the fact that the Map Division is a very small part of a great big organization which doesn't always get to do what it wants to do. Do you think it is any fun sitting in this city of red tape trying to do a job when you know lots of people are having the time of their lives jumping around in the field, working on jobs that have an end to them, and basking in the assurance that a field soldier always gets the sympathy?

21 SEP. Keep in mind our limitations on air pouch shipment. At the present time, OSS is allotted 200 pounds* for the entire organization for all theaters.

18 OCT. ...need for a commission for Sgt.

--- -- this is not an exceptional case ...

there are at least twenty similar cases where
the ability of qualified men to pursue their
assignments is unduly handicapped by their
rank.

12 NOV. In the process of moving ... to the Washington Auditorium, the following items were broken:

11 DEC. ...life is moderately strenuous. It is 9:30 P.M. and we are still on the job.

1945 I JAN. The amount of administration which has been developed in this organization in the last eight months would make even a "gobbledygook" Maverick yell uncle. A "channel" is a relatively decent thing. We now have ruts. Don't get the idea that I'm griping. I'm simply surprised we are still operating.

6 JAN. The Archives building is air conditioned, but in a Medieval manner, and late in the afternoon it is not unlike being back in the South Building with a west wind blowing off the brewery.

22 JAN. ... to the Army. They put him through all sorts of training until he was finally assigned to the job for which he was trained ... somewhere in the Adjutant General's office. Then, immediately, they released him to us. I'm slowly getting used to it.

^{*} Probably per week.

- 8 FEB. Supplementary gasoline for Anton Zenns ... 500 miles... 2 days to make the trip ... has a 1937 Chevrolet coach.
- 12 MAR. ...rather difficult to obtain new job openings in Washington, however, it is sometimes possible to secure position slots for overseas (Far East) assignment.
- 3 APR. The Map Division herewith requests cancellation of procurement action of Miss ---- which was submitted 2 December 1944.
- 7 MAY Please evaluate the work of individuals in your Section with respect to the memo... Subject: Recommendations for Award of Decorations to OSS Personnel who have performed exceptionally Meritorious Service in Washington.
- 7 JUN. The Map Division can replace Mrs.

 -- by a capable overseas returnee and, therefore, her release this fall has the approval of the Section, Division, and Branch chiefs.
- 7 JUL. This agency will observe the 44 hour week. The hour for release of employees on Sat. will be 12:45 P.M.
- 27 JUL. We trust you will give us permission to allow the Map Division Weekly Outpost letter to join its illustrious predecessor the "Literary Digest."
- 15 AUG. 8 hours worked (time off for Japanese surrender)
- 28 AUG. ...why don't you drive over now that gas is unlimited?

8 OCT. Your suggestion about ... a canvass of the young people in Washington who might like to secure positions in geography is excellent, but ... it would now be almost impossible to get any sort of decision from people contacted. Things are moving around so fast here that it is questionable whether anyone knows what he wishes to do.

19 NOV. ... right at that moment budgets were flying around thick and fast and I was relatively irresponsible.

29 DEC. ... I do not relish the prospect of severing my relationship to you both as individuals and as an organization even though for personal reasons it seems the wisest course for me to take. Although the Map Division is the first and only group of individuals it has been my privilege to direct, I have no hesitation whatever in saying that I never expect again to have such a satisfying experience. Each of you may take real pride in the realization of success in an important and difficult assignment during the war which has received abundant recognition by its continuance as a permanent part of the government. I would like you each to accept my sincerest thanks for a well done job, and I hope that each of you will find the coming years as gratifying as the last four have been for me.

.Happy New Year

ARTHUR H. ROBINSON

Appendix D. Glossary of Abbreviations

AMS .	•	•	•	•	ė	•	•	•	. •	Army Map Service
COI.	•	•	•	•	•	• ,	. •	•	•	Coordinator of Information
GSGS	•	•	•	•	•	•	•	•	•	Geographical Section, General Staff [British]
IRIS	•	•	•	•	•	•	•	•	•	Interim Research and Intel- ligence Service
ISTD	•	•	•	•	•	•	•	•	•	Inter-Service Topographical Department [British]
JANIS	•	•	•	•	•	•	•	•	•	Joint Army Navy Intelli- gence Studies
JCS .	•	•	•	•	•	•	•		•	Joint Chiefs of Staff
JISPB	•	•	•	•	•	•	•	•	•	Joint Intelligence Studies Publishing Board
MAPIS	•	•	•	•	• .	•	•	•	•	Map Information (Intelligence) Section
MIS .	•	•	• ·	•	•	•	•	•	•	Military Intelligence Service
MSD .	•	•	•	•	•	, •	.•.	•	•	Military Survey Directorate [British]
NID .	•	•	•	•	•	•	•	•	•	Naval Intelligence Division [British]
NIS .		•	•	•	•			•	•	National Intelligence Survey
OBGI	•	.•	•	•	•	•	•	•	•	Office of Basic and Geo- graphic Intelligence
ONI .	•		• .	•	•	•	•		•	Office of Naval Intelligence
	COI . GSGS IRIS ISTD JANIS JCS . JISPB MAPIS MIS . MSD . NID . NID . OBGI	COI GSGS . IRIS . ISTD . JANIS . JANIS . MAPIS . MIS MID NID OBGI .	COI GSGS	COI	COI	COI	COI	COI	COI	COI

- 104 -

- 105 -

Appendix E. Source References

- 1. National Archives. <u>Federal Records of World</u>

 <u>War II. Civilian Agencies</u>, US Government

 Printing Office, Washington, D.C., 1950, Vol. I

 (Nat. Archives Publ. No. 51-7), p. 22. U.
- Corey Ford. <u>Donovan of OSS</u>, Little, Brown and Company, Boston, 1970, pp. 148-152. U.
- 3. OSS, Research and Analysis Branch. History of the Research and Analysis Branch in the Office of Strategic Services, June 1941 -- September 1944, n.d., p. 19 (HS/HC 217) O/DCI/HS files. S. (Hereafter referred to as "R and A History.")
- 4. Ford, op. cit., pp. 110-111.
- 5. Notes, Janice Arleth, Apr 55, sub: Geographic Division, p. 1, (HS/HC 104) O/DCI/HS files. U. (Hereafter referred to as "Arleth Notes.")
- 6. National Archives. <u>Federal Records of World</u>

 <u>War II. Military Agencies</u>, US Government Printing Office, Washington, D.C., 1951, vol. II

 (Nat. Archives Publ. No. 51-8) p. 14. U.

- 106 -

- 7. Memo, 30 Dec 42, William L. Langer to Staff, sub: Reorganization of The Research and Analysis Branch, pp. 1-3, ORR O/Ch files, folder: R and A Branch, box 4, Job No. 52-7, CIA Records Center. C.
- 8. R and A History, p. 95 (3, above).
- 9. Regulation, 21 Jan 43, R and A Administrative Regulation No. 1, pp. 7-10, ORR O/Ch files, folder: R and A Branch, box 4, Job No. 52-7, CIA Records Center. R.
- 10. Status report, Sep 43, sub: The Map Division,
 Research and Analysis Branch [OSS], p. 1,
 (HS/HC 216) O/DCI/HS files. S. (Hereafter
 referred to as "Status report.")
- 11. OSS, Research and Analysis Branch. [Branch Histories] History of the Map Division 1941-44, n.d., p. 28, OSS, folder 46, box 32, RC Job No. 62-271, RID Archives. S. (Hereafter referred to as "Map Division History.")
- 12. R and A History, p. 97 (3, above).
- 13. R and A History, p. 96 (3, above).
- 14. List, Jan 45, sub: Geographic Subdivision [Far East Division, R and A Branch, OSS], p. 3, ORR O/Ch/G subj. files, folder: OSS Organization, box 3, Job No. 56-147, CIA Records Center. R.

- 15. R and A History, p. 92 (3, above).
- Offices of the Directorate for Intelligence,

 1943-60, Vol. I, "ORR," [by 1963,(b)(3) CIAAct
 pp. 185-186, HS-4, vol. 1, O/DCI/HS files.

 S/CIA INTERNAL USE ONLY/ACCESS CONTROLLED BY HS.
- 17. Leonard S. Wilson. "Lessons From the Experience of the Map Information Section, OSS," Geographical Review, April 1949, p. 298. U.
- 18. Ibid.
- 19. Ibid.
- 20. Map Division History, pp. 28-34 (11, above).
- 21. Wilson, op. cit., p. 299 (17, above).
- 22. Ibid.
- 23. Memo, 21 Sep 42, L.S. Wilson to R. Hartshorne, sub: Research Program of the MAPIS, pp. 1-5, ORR O/Ch/G subj. files, folder: Activities, Accomplishments, and Plans, box 3, Job No. 56-147, CIA Records Center. U.
- 24. Wilson, op. cit., p. 299 (17, above).
- 25. Map Division History, pp. 28-29 (11, above).
- 26. Arleth Notes, p. 3 (5, above).
- 27. Wilson, op. cit., p. 302 (17, above).

- 108 -

- 28. Ibid., p. 299.
- 29. Status report, p. 5 (10 above).
- 30. Memo, 9 Mar 42, L.S. Wilson to R. Hartshorne, sub: Activities and Plans of the MAPIS, Geog. Div., p. 2, ORR O/Ch/G subj. files, folder: Activities, Accomplishments, and Plans, box 3, Job No. 56-147, CIA Records Center. U.
- 31. Wilson, op. cit., p. 302 (17, above).
- 32. Ibid.
- 33. Ibid.
- 34. Ibid., pp. 302-303.
- 35. Memo, 20 Aug 42, L.S. Wilson to R. Hartshorne, sub: Research Program of the MAPIS, p. 3, ORR O/Ch/G subj. files, folder: Activities, Accomplishments, and Plans, box 3, Job No. 56-147, CIA Records Center. U.
- 36. Memo, 26 Jan 43, from Office of the Director,
 Branch of Research and Analysis, sub: Map
 Services for R and A, ORR O/Ch files, folder:
 OSS, Box 1, RC Job No. 52-7, CIA Records Center.
 U. [signed by W.L. Langer]

- 37. Memo, 27 Feb 43, W.L. Langer to all Office and Branch Heads, sub: OSS Map Service, ORR O/Ch files, folder: OSS, box 1, RC Job No. 52-7, CIA Records Center. U. [signed by W.L. Langer; signed and approved by William J. Donovan]
- 38. Special Order, 8 Jul 44, sub: Order, Procurement, and Transmittal of Maps, Atlases, and Map Information [Special Order No. 76, effective 6 Jul 44], ORR O/Ch files, folder: OSS, box 1, RC Job No. 52-7, CIA Records Center. U. [signed by William J. Donovan]
- 39. Wilson, op. cit., p. 302 (17, above).
- 40. Memo, 17 Jul 44, A.H. Robinson to Chandler

 Morse, attn L.S. Wilson, sub: [Agreement with
 GSGS, Procurement Outlook, OSS Map Catalog Card],
 ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug,
 box 2, Job 52-7, CIA Records Center. S.
- 41. Agreement, 10 Feb 43, MIS-ONI, Agreement with
 OSS in Respect to Strategic Surveys, Maps,
 Photographs, and Reports, ORR O/Ch files, folder:
 MIS-ONI, box 1, RC Job No. 52-7, CIA Records
 Center. C. [signed by William J. Donovan, Rear
 Adm. H.C. Train, and Maj. Gen. George V. Strong]

- 110 -

- 42. Directive, 27 Oct 43, sub: Functions of the Office of Strategic Services, [JCS 155/11/D], ORR O/Ch/G subj. files, folder: Joint Chiefs of Staff, box 3, Job No. 56-147, CIA Records Center. S
- 43. Memo, 16 Mar 45, Arthur H. Robinson to William L. Langer, sub: AMS Plans for Absorbing the OSS Map Intelligence Library, ORR O/Ch/G subj. files, folder: AMS, box 3, Job No. 56-147, CIA Records Center. U.
- 44. Wilson, op. cit., p. 304 (17, above).
- 45. Memo, 8 Feb 45, Capt. A. H. Robinson to Capt.

 David L. Hite, attn Lt. Durfee Larson, sub:

 [Memo of 20 Jan 45, Assistance to AMS Procurement Teams], ORR O/Ch files, folder:

 Chrono 45, 1 Jan-31 Mar, box 2, RC Job No.

 52-7, CIA Records Center. S.
- 46. Memo, 4 Jan 45, Lt. (j.g.) Robert M. Coffin to Capt. Arthur H. Robinson, sub: [Long-term Procurement Targets], ORR O/Ch files, folder: Chrono 45, 1 Jan-31 Mar, box 2, RC Job No. 52-7, CIA Records Center. S.

- 47. Memo, 17 Jul 44, A.H. Robinson to Chandler
 Morse (40, above).
- 48. [OSS, Research and Analysis Branch]. Review of the Accomplishments of All Outposts,

 [Mar 45 or later], pp. 1-11, ORR O/Ch files, folder: General, box 5, Job No. 52-7,

 CIA Records Center. U.
- 49. Ibid., pp. 5-6.
- 50. OSS, Research and Analysis Branch. [Branch Histories] METO Cairo R and A History, n.d., p. 214a, OSS, box 27, RC Job No. 62-271, RID Archives. S.
- 51. Leonard S. Wilson. "Library Filing, Classification, and Cataloging of Maps, with Special Reference to Wartime Experience," Annals of the Association of American Geographers, No. 1, March 1948, p. 6. U.
- 52. Memo, 21 Sep 42, L.S. Wilson to R. Hartshorne, p. 5 (23, above).
- 53. Steno record, meeting of 28 Aug 46, sub: [Map Cataloging Systems], p. 7, ORR O/Ch files, folder: Conferences re Map Library, box 4, Job No. 52-7, CIA Records Center, U.

- 54. Ibid., p. 10.
- 55. Ibid., p. 7.
- 56. Outline, 1944, sub: [MAPIS History by Main Periods], author unknown, p. 1, ORR O/Ch/G subj. files, folder: Activities, Accomplishments, and Plans, box 3, Job No. 56-147, CIA Records Center. U. (Hereafter referred to as "Outline, 1944, MAPIS History.")
- 57. Ibid.
- 58. Memo, 17 Jul 44, A.H. Robinson to Chandler
 Morse (40, above).
- 59. Memo, 14 Jun 43, Charles V. Crittenden to
 Arthur H. Robinson, sub: Catalog Card, ORR
 O/Ch files, folder: General, box 5, Job
 No. 52-7, CIA Records Center. U.
- 60. Memo, 8 Jul 43, Charles V. Crittenden to
 Ens. H.V.B. Kline, sub: Cataloging Blank,
 ORR O/Ch files, folder: General, box 5, Job
 No. 52-7, CIA Records Center. U.
- 61. Steno record, meeting of 28 Aug 46, p. 11 (53, above).
- 62. Ibid., p. 12.

- OSS, Research and Analysis Branch, Map Division.

 Official Area Breakdown: Complete List of File

 Numbers and Areas, 1944, OBGI/MLD active files.

 U. [Copy held by MLD Processing Branch carries inscription identifying H. David Vernon as principal compiler.]
- 64. Monthly report, Jul 44, MAPIS, Map Div., R and A, OSS, p. 6 MLD O/Ch files, box 2, folder: Monthly Reports, Job No. 54-140, CIA Records Center. U.
- 65. Memo, 26 Aug 44, A.H. Robinson to Maj. H.S. Hughes for C.V. Crittenden, sub: Cataloging and Reporting Systems, p. 1, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. S.
- 66. Memo, 6 Jul 45, Capt. Arthur H. Robinson to
 William L. Langer, sub: Analysis of Work Program,
 p. 14, ORR O/Ch files, folder: Chrono 45,
 1 Jun-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. S.
- 67. Memo, 8 Aug 44, A.H. Robinson to W.L. Langer, sub: Map Division, General Program of Future Actions, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7 CIA Records Center. S.

- 114 -

- 68. Memo, 28 Jul 44, L.H. Dykes and A.H. Robinson to Lt. John R. Randall, sub: [Col. Aldrich's Visit, Plans for MEDTO], ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. S.
- 69. Memo, 6 Sep 44, Arthur H. Robinson to Maj. H.

 Stuart Hughes attn C. V. Crittenden, sub:

 [Transmittals, Plans and Programs Underway],
 p. 2, ORR O/Ch files, folder: Chrono 44,
 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. S.
- 70. Memo, 8 Aug 44, A.H. Robinson to W.L. Langer (67, above).
- 71. American Geographical Society. "The American Geographical Society's Contribution to the Peace Conference," Geographical Review, Jan 19, p. 3. U.
- 72. Letter, 12 May 45, Otto E. Guthe to S. W. Boggs, sub: [Demand for Map/Geographic Services to UNCIO], ORR O/Ch/G subj. files, folder: Activities, Accomplishments, and Plans, box 3, Job No. 56-147, CIA Records Center. U.
- 73. Monthly report, May 44, MAPIS, p. 6 (64, above).

- 74. Memo, 13 Sep 44, Leonard H. Dykes to H. Stuart
 Hughes for C.V. Crittenden, sub: Review Memorandum, p. 2, ORR O/Ch files, folder: Chrono 44,
 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. S.
- 75. Status report, 23 Sep 44, sub: MAPIS, Map
 Div., R and A, pp. 3-4, ORR O/Ch/G subj.
 files, folder: Activities, Accomplishments,
 and Plans, box 3, Job No. 56-147, CIA Records
 Center. U.
- 76. Memo, 6 Sep 44, Arthur H. Robinson to H. Stuart Hughes attn C.V. Crittenden, pp. 1-2 (69, above).
- 77. Memo, 19 Oct 44, Arthur H. Robinson to William L. Langer, sub: Recommended Branch Orders, ORR O/Ch files, folder: William L. Langer, box 1, RC Job No. 52-7, CIA Records Center. U.
- 78. Memo, 23 Dec 44, Arthur H. Robinson to Chandler Morse attn Lt. (j.g.) H.V.B. Kline, sub:

 [Washington Situation Roundup], p. 1, ORR O/Ch files, folder: Chrono 44, 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA Records Center. S/CONTROL.

- 79. Ibid., p. 2.
- 80. Memo, 11 May 45, Capt. John R. Tregenza to
 John Colborn, sub: Map Filing Shelves, ORR
 O/Ch files, folder: Chrono 45, 1 Apr-30 May,
 box 2, RC Job No. 52-7, CIA Records Center. U.
- 81. Memo, 15 May 45, Capt. Arthur H. Robinson to
 Lt. William Applebaum, sub: Need for additional
 Personnel Map Intelligence Section, p. 1,
 ORR O/Ch files, folder: Chrono 45, 1 Jun-1 Dec,
 box 2, RC Job No. 52-7, CIA Records Center. S.
- 82. Ibid.
- 83. Memo, 22 Jun 45, Capt. A.H. Robinson to Chandler
 Morse for Lt. (j.g.) H.V.B. Kline and Chief
 R and A MEDTO for Lt. Durfee Larson, sub:
 Change of Map Policy ETO-MEDTO, p. 2, ORR O/Ch
 files, folder: Chrono 45, 1 Jun-1 Dec, box 2,
 RC Job No. 52-7, CIA Records Center. S.
- 84. Memo, 6 Sep 44, Arthur H. Robinson to H. Stuart Hughes attn C.V. Crittenden, p. 2 (69, above).
- 85. Memo, 6 Jul 45, Capt. Arthur H. Robinson to William L. Langer, pp. 12-13 (66, above).
- 86. Monthly report, 1943-45, MAPIS (64, above).
- 87. Wilson, op. cit., p. 301 (17, above).

- 88. Memo, 9 Mar 42, L.S. Wilson to R. Hartshorne, p. 2 (30, above).
- 89. Memo, 20 Aug 42, L.S. Wilson to R. Hartshorne,p. 3 (35, above).
- 90. Memo, 27 Jul 44, A.H. Robinson and L.H. Dykes to Capt. Spencer, sub: Your Memo of 18 Jul and Cable No. 1387, p. 2, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. U.
- 91. Memo, 8 Aug 44, A.H. Robinson to W.L. Langer, p. 1 (67, above).
- 92. Ibid.
- 93. Report, May 45, sub: A Supplementary Map Control System for the Map Division [by Henry Conrad, Management Analysis Division], ORR O/Ch files, folder: Map Library -- General, box 4, Job No. 52-7, CIA Records Center. U.
- 94. Memo, 26 Jul 45, Louis M. Ream to Capt. Arthur Robinson, sub: [Tabulating Card Transparency System for MAPIS], ORR O/Ch files, folder: Map Library -- General, box 4, Job No. 52-7, CIA Records Center. U.
- 95. Wilson, op. cit., pp. 300-302 (17, above).

- 96. Memo, 15 Dec 43, Lt. Leonard S. Wilson to
 Lt. Wm. Applebaum, sub: Microfilm Unit [for
 Algiers Outpost], ORR O/Ch files, folder:
 General, box 5, Job No. 52-7, CIA Records
 Center. U.
- 97. Memo, 26 Apr 45, Capt. Arthur H. Robinson to
 Lt. James Q. May, sub: Sgt, Robert Bullock,
 ORR O/Ch files, folder: Chrono 45, 1 Apr-30 May,
 box 2, RC Job No. 52-7, CIA Records Center. U.
- 98. Memo, 8 Aug 44, A. H. Robinson to W.L. Langer, p. 1 (67, above).
- 99. Ibid.
- 100. Monthly report, Nov 43, MAPIS (64, above).
- 101. Monthly report, Jan 43-Nov 45, MAPIS (64, above).

 Also, Memo, 15 Jan 45, Lt. Arch C. Gerlach to

 Lt. Leonard S. Wilson, sub: Historical Report

 on Activities in the Map Intelligence Section,

 ORR O/Ch/G subj. files, folder: Activities,

 Accomplishments, and Plans, box 3, Job No.

 56-147, CIA Records Center. U.
- 102. Monthly report, Jan 43-Nov 45, MAPIS (64, above).

- 103. Letter, 14 Dec 44, L.S. Wilson to Elgin
 Williams, sub: [Map Request of Hon. Lyndon B.
 Johnson], ORR O/Ch files, folder: Chrono 42,
 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. S.
- 104. Monthly report, Nov 43, MAPIS (64, above).
- 105. Letter, 12 May 45, Otto E. Guthe to S.W. Boggs (72, above).
- 106. Monthly report, Jan 43-Jul 45, MAPIS (64, above).
- 107. Letter, 17 Sep 45, W.L. Langer to George
 Beishlag, sub: [Term. of Duty with CAHSA Outpost; Commendation], ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. S.
- 108. Outline, 1944, MAPIS History, p. 1 (56, above).
- 109. Ibid., p. 2
- 110. Memo, 18 Aug 44, Arthur H. Robinson to Chandler
 Morse for Lt. Leonard S. Wilson, sub: [Washington Situation], pp. 2-3, ORR O/Ch files, folder:
 Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7,
 CIA Records Center. S.

- 111. OSS, Research and Analysis Branch. The Establishment of Foreign Map Intelligence for the Federal Government, 11 Nov 44, ORR O/Ch/G subj. files, folder: Army Map Service, box 3, Job No. 56-147, CIA Records Center. S. [Prepared mainly by Arthur H. Robinson.]
- 112. Memo, 12 Jan 45, Capt. Arthur H. Robinson to Capt. John R. Tregenza, sub: [Memo Req. by General Donovan re Philosophy and Org. of a Map Intelligence Department in a Postwar Central Intelligence Service], ORR O/Ch files, folder: Chrono 45, 1 Jan-31 Mar, box 2, RC Job No. 52-7, CIA Records Center. S.
- 113. Status report, 23 Sep 44, sub: MAPIS, Map Div., R and A, pp. 6-7 (75, above).
- 114. Monthly report, Dec 44, MAPIS (64, above).
- 115. Wilson, op. cit., p. 307 (17, above).
- 116. <u>Ibid</u>.
- 117. Jack Zlotnick. <u>National Intelligence</u>, Industrial College of the Armed Forces, Washington, D.C., 1964, p. 51. U.
- 118. Monthly report, Jan 45, MAPIS (64, above).
- 119. JANIS Records, 54-62, OBGI/ED active files. C.

- 121 -

- 120. Monthly report, Jan 45, MAPIS (64, above).
- 121. Ibid.
- 122. Ibid., Apr-Aug 45.
- 123. Ibid., Aug-Nov 45.
- 124. Letter, 19 Sep 45, S.W. Boggs to Capt. Arthur
 H. Robinson, sub: [Prospective State Department
 Interests], p. 2, ORR O/Ch files, folder: OSS,
 box 1, RC Job No. 52-7, CIA Records Center. S.
- Meeting, 11 Jul 45, A.P. Biggs, E.W. Miller,
 L.H. Dykes, ORR O/Ch/G subj. files, folder:
 Organization and Management, box 3, Job No.
 56-147, CIA Records Center. U.
- 126. <u>Ibid</u>.

 Also, Memo, 6 Jul 45, Capt. Arthur H. Robinson to William L. Langer, p. 16 (66, above),
- 127. National Archives. <u>Federal Records of World</u>

 <u>War II</u>, <u>Military Agencies</u>, pp. 28-29 (6, above).
- 128. Ford, op. cit., pp. 252-255 (2, above).

 Also, OSS, R and A Br. Review of the Accomplishments of All Outposts, p. 1 (48, above).
- 129. Map Division History, p. 36 (11, above).

 Also, Memo, 18 Dec 43, Lt. Leonard S. Wilson

- 122 -

- to Lt. William Applebaum, sub: Outpost Offices

 -- Map Division [Gerlach Appointed Outpost
 Officer], ORR O/Ch files, folder: Chrono 43,
 1 Jun-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. U.
- 130. Memo, 30 Jun 44, Leonard H. Dykes to Col. Edward J.F. Glavin attn Maj. H. Stuart Hughes, sub:

 Plans for Change in Map Division Outpost Unit,

 MEDTO, p. 1, ORR O/Ch files, folder: Chrono 44,

 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA

 Records Center. U.
- 131. Memo, 29 May 44, Arthur H. Robinson to Dr.
 William L. Langer, sub: [Need for a Map Intelligence Representative in Switzerland], ORR
 O/Ch/G subj. files, box 3, folder: Activities,
 Accomplishments, and Plans, Job No. 56-147,
 CIA Records Center. C.
- 132. Memo, 27 Jul 44, Arthur H. Robinson to Map Division Outposts, sub: Certain Items in the Overall Procedures, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. S.

- 133. [Data Sheets], Sep 45, Receipts from Outposts/Transmittal to Outposts, OSS, R and A,
 Map Div, ORR O/Ch files, folder: Outpost
 Transmittals and Receipts, box 5, Job No.
 52-7, CIA Records Center. U.
- 134. Map Division History, pp. 36-37 (11, above).
- 135. Memo, 20 Jan 45, Capt. Arthur H. Robinson to Dr. William L. Langer, sub: [Recommendation for Promotion of Lt. Wilson], ORR O/Ch files, folder: Chrono 45, 1 Jan-31 Mar, box 2, RC Job No. 52-7, CIA Records Center. U.
- 136. Wilson, op. cit., p. 304 (17, above).
- 137. Steno record, conference of 9 Dec 44, sub:

 [Report of Lt. William Applebaum on His Tour of R and A Outposts], pp. 2-3, ORR O/Ch files, folder: Conferences, box 5, Job No. 52-7,

 CIA Records Center. U.
- 138. <u>Ibid</u>.
- 139. <u>Ibid</u>.
- 140. Ibid., p. 5.
- 141. <u>Ibid.</u>, pp. 8-10, 12-14.
- 142. Memo, 22 Jul 44, Arthur H. Robinson to Dr. William Langer, sub: Crystal Gazing, p. 4, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. C.

- 143. Memo, 30 Jun 44, Leonard H. Dykes to Col. Edward J.F. Glavin, p. 1 (130, above).
- 144. [Newsletter], 15 Dec 44, [Map Division Washington] to All Map Division Field Officers, sub:

 [General Roundup: Requirements], pp. 1-11 and graph at end, ORR O/Ch files, folder: Letters and Memos to Map Division Outposts, box 5, Job No. 52-7, CIA Records Center. S.
- 145. [Data sheet], 1944, Volume of Titles and Copies

 Sent [to] Outposts, OSS, R and A, Map Division,

 ORR O/Ch files, folder: Outpost Transmittals

 and Receipts, box 5, Job No. 52-7, CIA Records

 Center. U.

Also, [Data sheets], Sep 45, Receipts from Outposts/Transmittals to Outposts (133, above).

- 146. Memo, 5 Jul 44, Map Division, Washington, to
 Col. John G. Coghlin attn Capt. Joseph E. Spencer,
 sub: Report No. 6 -- Map Division News, p. 10,
 ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug,
 box 2, RC Job No. 52-7, CIA Records Center. U.
- 147. Map Division History, pp. 38-39 (11, above).

- 148. Memo, 5 Jul 44, Map Division, Washington, to Col. John G. Coghlin, pp. 10-11 (146, above).

 Also, Memo, 16 Jun 44, Arthur H. Robinson and Leonard H. Dykes to Col. John G. Coghlin attn Capt. Joseph E. Spencer, sub: Memorandum "Relations of the Map Division to the Rest of R and A in the Outpost," ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug, box 2, RC Job No. 52-7, CIA Records Center. U.
- 149. [Summary], 1945, [OSS, R and A, Map Division], sub: Communications and Communication Totals, ORR O/Ch files, folder: General, box 5, Job No. 52-7, CIA Records Center. U.
- 150. Memo, 5 Jul 44, Map Division, Washington, to Col. J.G. Coghlin, p. 1 (146, above).
- 151. Memo, 11 Dec 44, Robert M. Coffin to Frederick
 A. Spencer, sub: Air Corps Jacket, ORR O/Ch
 files, folder: Chrono 44, 1 Sep-31 Dec, box 2,
 RC Job No. 52-7, CIA Records Center. U.
- 152. OSS, R and A. Review of Accomplishments of All Outposts, pp. 2-3 (48, above).
- 153. Monthly report, Dec 44, MAPIS, p. 6 (64, above).

- 154. Memo, 5 Jul 44, Map Division, Washington, to Col J.G. Coghlin, pp. 10-11 (146, above).
- 155. Steno record, conference of 9 Dec 44, [Applebaum Report], (137, above).
- 156. Memo, 21 Jul 42, Leonard S. Wilson to Dr.

 Hartshorne, sub: Organization of the Map
 Information Section, p. 4, ORR O/Ch/G subj.

 files, folder: Activities, Accomplishments, and
 Plans, box 3, Job No. 56-147, CIA Records
 Center. U.
- 157. Status report, Sep 43, fig. III (10, above).
- Mr. J. Ridge Hicks attn Mrs. Goodfellow, sub:

 Re-organization of the Map Division, ORR O/Ch
 files, folder: Chrono 45, 1 Jan-31 Mar, box 2,

 RC Job No. 52-7, CIA Records Center. U.
- OSS, Presentation Branch. OSS Organization

 Charts [portfolio], 2 Nov 43, p. 27c, ORR

 O/Ch/G subj. files, folder: OSS Org. Charts,

 box 3, Job No. 56-147, CIA Records Center. S.

- 160. Executive Order, 20 Sep 45, President Harry S.

 Truman, sub: Termination of the Office of
 Strategic Services and Disposition of Its
 Functions, p. 1, ORR O/Ch/G subj. files,
 folder: Merger -- OSS-State, box 3, Job No.
 56-147. CIA Records Center. U.
- 161. Memo, 8 Aug 45, Capt. John R. Tregenza to
 Michael Reidy, sub:[Personnel Transferred to
 AMS], ORR O/Ch files, folder: Chrono 45,
 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. S.
- 162. Memo, 7 Nov 45, Arthur H. Robinson to Map
 Division Personnel, sub: [Organization Changes],
 ORR O/Ch/G subj. files, folder: Functions and
 Organization, box 3, Job No. 56-147, CIA
 Records Center. U.
- 163. Letter, 20 Nov 45, Arthur H. Robinson to
 Lloyd D. Black, ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. U.
- 164. Memo, 31 Jul 45, Capt. Arthur H. Robinson to

 James Q. May, sub: [Proposed Procedure for

 Expenditures 1945-46], ORR O/Ch files, folder:

 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7,

 CIA Records Center. S.

- 165. Memo, 28 Jun 45, Capt. A.H. Robinson to Lt.

 R.J. Voskuil, Lt. A.C. Gerlach, and Capt. J.R.

 Tregenza, sub: [Budget for Fiscal 1946], ORR

 O/Ch files, folder: Chrono 45, 1 Jun-29 Dec,
 box 2, RC Job No. 52-7, CIA Records Center. U.
- 166. Memo, 8 Aug 45, Capt. John R. Tregenza to Michael Reidy (161, above).
- 167. Memo, 28 Jun 45, Capt. A.H. Robinson to Lt.
 R.J. Voskuil, et al (165, above).
- 168. George F. Deasy. "War-Time Changes in Occupation of Geographers," The Professional

 Geographer, April 1948, vol. 7 (old series),
 p. 33. U.
- 169. Memo, 26 Sep 45, Lt. Arch C. Gerlach to Lt.

 Leonard Wilson, sub: Qualifications of Personnel in Map Intelligence Section, ORR O/Ch files,
 folder: Personnel -- Civilian, box 1, RC Job
 No. 52-7, CIA Records Center. U.
- 170. Memo, 22 Jun 45, Capt. A.H. Robinson to Chandler Morse, p. 2 (83, above).
- 171. Status report, Sep 43, pp. 5-6 (10, above).
- 172. Map Division chrono file, 14 Aug-29 Dec 45, ORR

 O/Ch files, folder: Chrono 45, 1 Jun-29 Dec,

 box 2, RC Job No. 52-7, CIA Records Center. S.

· 129 **-**

- 173. Memo, 1 Nov 43, Leonard S. Wilson to Ens. John D. Wilson, sub: Personnel for Outposts, ORR O/Ch files, folder: Chrono 43, 1 Jun-31 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 174. Memo, 10 Sep 42, Leonard S. Wilson to William Applebaum, sub: Commissions, ORR O/Ch files, folder: Chrono 42, 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 175. Letter, 3 Jul 43, Leonard S. Wilson to Lt.

 John R. Randall, sub: [Assignment Action], ORR

 O/Ch files, folder: Chrono 43, 1 Jun-31 Dec,

 box 2, RC Job No. 52-7, CIA Records Center. U.
- 176. Letter, 22 May 44, Arthur H. Robinson to Dr.

 Nels A. Bengston, sub: [Lt. Durfee Larson,

 Available Army Officers], ORR O/Ch files, folder:

 Chrono 44, 1 Jan-31 May, box 2, RC Job No. 52-7,

 CIA Records Center. U.
- 177. Memo, 9 Jul 43, L. S. Wilson to Arthur H.

 Robinson, sub: Military Personnel in the Map
 Division, ORR O/Ch files, folder: Chrono 43,

 1 Jun-31 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. U.

- 178. Memo, 8 Mar 45, Capt. Arthur H. Robinson to
 Lt. William Applebaum, sub: Personnel -- Map
 Division, pp. 6-7, ORR O/Ch files, folder:
 Chrono 45, 1 Jan-31 Mar, box 2, RC Job No.
 52-7, CIA Records Center. C.
- 179. Memo, 19 Feb 43, Arthur H. Robinson to Col.

 John Nash, sub: Leonard S. Wilson, ORR O/Ch

 files, folder: Chrono 43, 1 Jan-31 May, box 2,

 RC Job No. 52-7, CIA Records Center. U.
- 180. Memo for record, 4 Oct 44, sub: Biography of Charles V. Crittenden, ORR O/Ch files folder: Chrono 44, 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 181. Memo, 31 Jan 45, Capt. Arthur H. Robinson to
 Lt. (j.g.) C. W. Olmstead, sub: [Positions
 Held -- for Personal Records], ORR O/Ch files,
 folder: Chrono 45, 1 Jan-31 Mar, box 2, RC
 Job No. 52-7, CIA Records Center. U.
- 182. Memo, 7 Nov 45, Arthur H. Robinson to Map Division Personnel (162, above).
- 183. Notes, Apr 70, folder: MAPIS through 1945, OBGI/GD history files. U.

- 184. Memo, 18 Aug 45, Capt. Arthur H. Robinson to
 Lt. William A. Applebaum, sub: Separation of
 Map Division Personnel, ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. U.
- 185. R and A History, pp. 24, 84-85 (3, above).
- 186. Memo, 6 Sep 44, Arthur H. Robinson to Maj. H. Stuart Hughes, pp. 1-2 (69, above).
- 187. Association of American Geographers, <u>Directory</u>
 of the Association of American Geographers,
 Washington, D.C., 1970. U.
- 188. Memo, 5 Oct 44, Arch C. Gerlach to Mr. Bayliss, sub: Burton W. Adkinson, ORR O/Ch files, folder: Chrono 44, 1 Sep-31 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 189. R and A History, p. 85 (3, above).
- 190. Memo, 16 Jun 44, Arthur H. Robinson and Leonard H. Dykes to Col. John G. Coughlin, p. 1 (148, above).
- 191. Letter, 9 Nov 69, D. M. Anderson to Louis
 Thomas, sub: [Map Division, OSS, WW II],
 OBGI/GD history files, folder: MAPIS to 45. U.

- 192. Memo, 20 Jan 45, Capt. Arthur H. Robinson to
 Dr. William L. Langer (135, above).
- 193. Memo, 27 Jun 45, Arthur H. Robinson to OSS
 Citations Officer, sub: Recommendation for
 Decoration for Leonard S. Wilson, ORR O/Ch
 files, folder: Chrono 45, 1 Jun-29 Dec, box 2,
 RC Job No. 52-7, CIA Records Center. R.
- 194. Memo, 17 Jul 44, A.H. Robinson to Chandler Morse, p. 5 (40, above).
- 195. Ibid., p. 1.
- 196. Memo for record, 4 Oct 44 (180, above).
- 197. Monthly report, Nov 43, MAPIS, sec. V (64, above).
- 198. Letter, 18 Jul 45, Arthur H. Robinson to Dr.
 John L. Rich, sub: [Recommendation for Charles
 V. Crittenden], ORR O/Ch files, folder: Chrono
 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA
 Records Center. U.
- 199. Status report, p. 34 (10, above).
- 200. Memo, 6 Sep 44, Arthur H. Robinson to Maj. H. Stuart Hughes, p. 1 (69, above).

- 201. Letter, 4 Sep 45, Arthur H. Robinson to Prof.
 Glenn T. Trewartha, sub: [Unstable Situation,
 Future Plans, Disposition of the OSS Map Collection], pp. 1-2, ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. U.
- 202. Memo, 3 Aug 45, Capt. Arthur H. Robinson to
 Maj. Joseph Spencer, sub: [MAPIS Organization
 and Activities], ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. C.
- 203. Memo, 1 Jan 45, Capt, Arthur H. Robinson to
 Maj. Joseph E. Spencer, sub: [General Roundup],
 p. 2, ORR O/Ch files, folder: Chrono 45,
 1 Jan-31 Mar, box 2, RC Job No. 52-7, CIA
 Records Center. U.
- 204. Memo, 16 Dec 43, Lt. Leonard S. Wilson to Lt. Wm. Applebaum, sub: Lt. (j.g.) Fred W. Foster, ORR O/Ch files, folder: General, box 5, Job 52-7, CIA Records Center. U.

- 205. Letter, 24 Apr 42, L.S. Wilson to Clarence W. Olmstead, sub: [Prospective Employment MAPIS Work], ORR O/Ch files, folder: Chrono 42, 1 Jan-30 Apr, box 2, RC Job No. 52-7, CIA Records Center. U.
- 206. Memo, 31 Jan 45, Capt. Arthur H. Robinson to Lt. (j.g.) C.W. Olmstead (181, above).
- 207. Memo, 21 Oct 44, Leonard H. Dykes to Lt. (j.g.)

 Jay S. Seeley attn Capt. John Randall, sub:

 Your Memorandum, 21 Sep 44, p. 9, ORR O/Ch

 files, folder: Chrono 44, 1 Sep-31 Dec, box 2,

 RC Job No. 52-7, CIA Records Center. U.
- 208. Letter, 24 Aug 45, Arthur H. Robinson to
 Director of Personnel, Library of Congress,
 sub: [Burton W. Adkinson], ORR O/Ch files,
 folder: Chrono 45, 1 Jun-29 Dec, box 2, RC
 Job No. 52-7, CIA Records Center. U.
- 209. Map Division History, p. 28 (11, above).
- 210. Memo, 14 Nov 44, Arthur H. Robinson to William
 L. Langer, sub: Map Division Space Problems,
 ORR O/Ch files, folder: Chrono 44, 1 Sep-31 Dec,
 box 2, RC Job No. 52-7, CIA Records Center. C.
- 211. Memo, 1 Jan 45, Capt. Arthur H. Robinson to Maj.

 Joseph E. Spencer, p. 2 (203, above).

- 135 -SECRET

- 212. Memo, 18 Dec 44, Capt. John R. Tregenza to
 James Q. May, sub: Courier and Messenger
 Service for the Map Division, ORR O/Ch files,
 folder: Chrono 44, 1 Sep-31 Dec, box 2, RC
 Job No. 52-7, CIA Records Center. U.
- 213. Memo, 12 Jan 45, Capt. Arthur H. Robinson to Capt. John R. Tregenza (112, above).
- 214. OSS, R and A. <u>The Establishment of Foreign</u>

 Map Intelligence for the Federal Government

 (111, above).
- 215. [OSS, R and A, Map Division]. Preliminary Outline of a Map Intelligence Program, [c. 1944], p. 3, ORR O/Ch/G subj. files, box 3, folder: AMS, Job No. 56-147, CIA Records Center. S.
- 216. Wilson, op. cit., p. 306 (17, above).
- 217. [OSS, R and A, Map Division]. Program for

 Men Being Processed for Outposts, [c. 1944],

 ORR O/Ch/G subj. files, folder: Functions and

 Organization, box 3, Job No. 56-147, CIA

 Records Center. U.
- 218. Memo, 29 May 44, Arthur H. Robinson to Dr. William L. Langer (131, above).
- 219. [OSS, R and A Br.]. Review of the Accomplishments
 of All Outposts, p. 1 (48, above).

- 136 -

SECRET

- 220. Memo, 17 Jul 44, A. H. Robinson to Chandler Morse (40, above).
- 221. Memo, 2 Apr 45, Hibberd V.B. Kline to Director, OSS, sub: Report of Lt. Kline -- Temporary Duty in Washington from ETO, p. 2, ORR O/Ch files, folder: Chrono 45, 1 Apr-30 May, box 2, RC Job No. 52-7, CIA Records Center. S.
- 222. Memo, 29 Mar 45, Capt. A.H. Robinson to Map
 Division Outposts, sub: Vultures -- Their
 Growth and Treatment, ORR O/Ch files, folder:
 Chrono 45, 1 Jan-31 Mar, box 2, RC Job No. 52-7,
 CIA Records Center. S/CONTROL.
- 223. Ibid.
- 224. Memo, 2 Apr 45, Hibberd V.B. Kline to Director, OSS (221, above).
- 225. Wilson, op. cit., p. 306 (17, above).
- 226. Memo, 16 Jun 45, Arthur H. Robinson to Lt. Col.
 H. Stuart Hughes, sub: [Situation Roundup and
 General Guidance], ORR O/Ch files, folder:
 Chrono 45, 1 Jun-29 Dec, box 2, RC Job No.
 52-7, CIA Records Center. C.

- 227. Memo, 10 Feb 45, Capt. A.H. Robinson to Dr. C.V. Crittenden, sub: [General Recapitulation], p. 4, ORR O/Ch files, folder: Chrono 45, 1 Jan-31 Mar, box 2, RC Job No. 52-7, CIA Records Center. S.
- 228. [OSS, R and A Br.]. Review of the Accomplishments of All Outposts, p. 6 (48, above).
- 229. Memo, 5 Apr 45, Capt. Arthur H. Robinson to Lt.
 William A. Applebaum, sub: Proposed Disposition
 of Map Division Personnel in ETO, ORR O/Ch files,
 folder: Chrono 45, 1 Apr-30 May, box 2, RC
 Job No. 52-7, CIA Records Center. S.
- 230. [OSS, R and A]. Program for Men Being Processed for Outposts (217, above).
- 231. Steno record, meeting of 20 Sep 46, p. 2 (53, above).
- 232. Memo, 9 Jul 45, Arthur H. Robinson to Comdr. William McGovern, sub: JTS 55/D, 6 Jul 45, Establishment of a Centralized File of Maps and Map Information, p. 3, ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. C.
- 233. Monthly report, Apr 45, MAPIS, p. 1 (64, above).

- 234. Memo, 31 Jan 45, Capt. John R. Tregenza to
 James Martin, sub: Map File Cases, Map Intelligence Section, ORR O/Ch files, folder:
 Chrono 45, 1 Jan-31 Mar, box 2, RC Job No.
 52-7. CIA Records Center. U.
- 235. Memo, 1 Jan 45, Capt. Arthur H. Robinson to Maj. Joseph E. Spencer, p. 2 (203, above).
- 236. Ibid., p. 6
- 237. Memo, 22 Jun 45, Capt. A.H. Robinson to Chandler Morse, p. 2 (83, above).
- 238. Ibid.
- 239. Memo, 15 Mar 45, Capt. W.D. Wilkinson, AMS, to Chief, Map Information Section, Map Division, OSS, sub: Original Sheets for Retention, ORR O/Ch/G subj. files, box 3, folder: Army Map Service, Job No. 56-147, CIA Records Center. U.
- 240. Memo, 15 Mar 45, Capt. W.D. Wilkinson, AMS, to Chief, Map Information Section, Map Division, OSS, sub: Request for Pouch Lists, ORR O/Ch/G subj. files, box 3, folder: Army Map Service, Job No. 56-147, CIA Records Center. U.

- 241. Memo, 15 May 45, Capt. Arthur H. Robinson to
 Lt. William Applebaum (81, above).
- 242. Memo, 16 Mar 45, Capt. Arthur H. Robinson to Dr. William L. Langer, sub: Army Map Service Plans for Absorbing OSS Map Intelligence Library, ORR O/Ch/G subj. files, box 3, folder: Army Map Service, Job No. 56-147, CIA Records Center. U.
- 243. Memo, 15 Oct 45, Col. W.D. Milne to Strategic Services Unit, State Department, sub: Map Library, ORR O/Ch/G subj. files, box 3, folder: Army Map Service, Job No. 56-147, CIA Records Center. U.
- 244. Ibid.
- 245. Memo, 17 Jan 46, Otto E. Guthe (by A.C. Gerlach) to Col. Alfred McCormack, sub: Problems Relating to the Exchange of Maps Between the Department of State and the Army Map Service, ORR O/Ch files, folder: AMS, box 3, RC Job No. 52-7, CIA Records Center. R.
- 246. Letter, 17 Sep 45, William L. Langer to Curtis

 M. Wilson, sub: [Commendation on CAHSA Work], ORR

 O/Ch files, folder: Chrono 45, 1 Jun-29 Dec,

 box 2, RC Job No. 52-7, CIA Records Center. U.

- 140 -

- 247. Map Division chrono file, Jan 43 Dec 44,

 ORR O/Ch files, folders: Chrono 43, 44 (172, above).
- 248. Executive Order, 20 Sep 45 (160, above).
- 249. Memo, 9 Aug 45, Capt. John R. Tregenza to Michael Reidy (161, above).
- 250. Memo, 15 Oct 45, Col. W.D. Milne to Strategic Services Unit. State (243, above).
- 251. Letter, 4 Sep 45, Arthur H. Robinson to Prof.
 Glenn T. Trewartha, p. 2 (201, above).
- 252. Ford, op. cit., pp. 312-316 (2, above).
- 253. Letter, 19 Nov 45, Arthur H. Robinson to Cpl.

 Harry Blu, sub: [Shutdown of Cairo Outpost],

 ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec,
 box 2, RC Job No. 52-7, CIA Records Center. U.
- 254. Letter, 20 Nov 45, Arthur H. Robinson to John K. Wright, sub: [Answers to Questions Regarding Geographic Work in IRIS], p. 5, ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 255. Letter, 22 Aug 45, Arthur H. Robinson to C. S. Hammond, sub: [Adkinson -- Future Plans], ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 42-7, CIA Records Center. U

- 141 -

- 256. Letter, 4 Sep 45, Arthur H. Robinson to Prof.
 Glenn T. Trewartha (201, above).
- 257. Letter, 11 Oct 45, Arch C. Gerlach to Margaret W. Starnes, sub: [Employment Situation], ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 258. Memo, 13 Sep 45, Lt. L.S. Wilson to Col. Estey, sub: Request for Account Audit, ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 259. Letter, 6 Nov 45, A.H. Robinson to G. Donald Hudson, sub: [OSS Maps], ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. U.
- 260. Memo, 7 Nov 45, Arthur H. Robinson to Map Division Personnel (162, above).
- 261. Letter, 20 Nov 45, A.H. Robinson to Lloyd D. Black (163, above).
- 262. Letter, 20 Nov 45, Arthur H. Robinson to John K. Wright (254, above).
- 263. <u>Ibid</u>.
- 264. Roger Hilsman, Strategic Intelligence and

 National Decisions, The Free Press, Glencoe,

 Illinois, 1956, p. 29. U.

- 142 -

SECRET

- 265. OSS, R and A. The Establishment of Foreign

 Map Intelligence for the Federal Government

 (111, above).
 - 266. Steno record, meeting of 8 Aug 44, sub:

 Conference with Lt. McCarthy, p. 21, ORR

 O/Ch files, folder: Conferences, box 5,

 Job 52-7, CIA Records Center. S.
 - 267. OSS, R and A. The Establishment of Foreign

 Map Intelligence for the Federal Government

 (111, above).
 - 268. Memo, 25 Oct 45, Capt. Arthur H. Robinson to Col. Preston E. James, sub: Work of the Map Division in the Department of State and Its Relation to Other Map Departments, p. 2, ORR O/Ch files, folder: Chrono 45, 1 Jun-29 Dec, box 2, RC Job No. 52-7, CIA Records Center. C.
 - 269. Memo, 28 Jul 44, L.H. Dykes and A.H. Robinson to Lt. John R. Randall, p. 3 (68, above).
 - 270. Letter, 20 Nov 45, Arthur H. Robinson to John K. Wright, p. 2 (254, above).

- 271. Memo, 10 Dec 45, Otto E. Guthe to Mr. Bradford, sub: Suggested Draft of Plan for the Division of Map Intelligence and Cartography, p. 7, ORR O/Ch/G subj. files, box 3, folder: Merger OSS/State, Job No. 56-147, CIA Records Center. U.
- 272. Memo, 30 Jan 51, Chief, D/G ORR to Chief, S/AD O/RR, sub: Suggested T/O for Geographic Division, etc., ORR O/Ch/G subj. files, folder: Chrono 1 Jul 50 to 30 Jun 51, box 8, Job No. 58-400, CIA Records Center. S.
- 273. Memo, 4 May 51, Chief D/G/RR to Chief S/AD/RR, sub: Request for Revision of T/O for Geographic Division, ORR O/Ch/G subj. files, folder: Chrono 1 Jul 50 to 30 Jun 51, box 8, Job No. 58-400, CIA Records Center. S.
- 274. Memo, 27 Jul 51, Deputy Chief, D/G to DAD/RR, sub: Proposed Training Program for Personnel in D/G, ORR O/Ch/G subj. files, folder: Chrono 1 Jul 51 to 30 Jun 52, box 8, Job No. 58-400, CIA Records Center. S.
- 275. Louis Thomas, "Geographic Intelligence,"

 Studies in Intelligence, Vol. 7, No. 4, Fall
 63, CIA, pp. A7-A9, A16. U. (U.S. ONLY)

- 144 -

- 276. Fanning, op. cit., pp. 185-195 (16, above).
- 277. Wilson, op. cit., p. 298 (17, above).
- 278. Ibid., p. 299.
- 279. Memo, 22 Jun 45, Capt. A.H. Robinson to Chandler Morse (83, above).
- 280. Hilsman, loc. cit. (264, above).
- 281. Memo, 21 Aug 44, Capt. Arthur H. Robinson to Capt. Joseph E. Spencer, sub: Your Letter of 7 Aug, pp. 4-5, ORR O/Ch files, folder: Chrono 44, 1 Jun-31 Aug. box 2, RC Job No. 52-7, CIA Records Center. C.
- 282. Monthly report, Nov 43, MAPIS (64, above).
- 283. Memo, 1 Jan 45, Capt. Arthur H. Robinson to

 Maj. Joseph E. Spencer, pp. 3-4 (203, above).
- 284. Memo, 6 Jul 45, Capt. Arthur H. Robinson to William L. Langer, p. 2 (66, above).
- 285. Letter, 8 Aug 45, Arthur H. Robinson to Lloyd
 D. Black, sub: [Situation Review], ORR O/Ch
 files, folder: Chrono 45, 1 Jun-29 Dec, box 2,
 RC Job No. 52-7, CIA Records Center. U.
- 286. Zlotnick, op. cit., p. 2 (117, above).
- 287. Wilson, op. cit., p. 309 (17, above).
- 288. Monthly report, Oct 42 Nov 45, MAPIS (64, above).

- 145 -SECRET

- 289. Wilson, op. cit., p. 309 (17, above).
- 290. Memo, 27 Feb 43, W.L. Langer to all Offices and Branch Heads (37, above). Also, Special Order, 8 Jul 44 (38, above).
- 291. Wilson, op. cit., p. 309 (17, above).
- 292. National Archives. <u>Federal Records of World</u>

 <u>War II</u>, <u>Civilian Agencies</u>, p. 222 (1, above).
- 293. Arleth Notes, p. 1 (5, above).
- 294. R and A History, p. 85 (3, above).
- 295. Map Division History, p. 28 (11 above).
- 296. National Archives. <u>Federal Records of World</u>

 War II, Civilian Agencies, pp. 222-223 (1, above).
- 297. Arleth Notes, p. 3 (5, above).
- 298. Ford, op. cit., p. 162 (2, above).
- 299. Memo, 30 Dec 42, William L. Langer to Staff (7, above).
- 300. National Archives. <u>Federal Records of World</u>

 <u>War II</u>, <u>Military Agencies</u>, p. 774 (6, above).
- 301. Memo, 28 Sep 45, Arthur H. Robinson to Dr.
 William L. Langer, sub: [Description of Map
 Division and its Activities], p. 3, ORR O/Ch
 files, folder: Chrono 45, 1 Jun-29 Dec, box 2,
 RC Job No. 52-7, CIA Records Center. C.

- 302. Monthly report, Jan-Feb 43, MAPIS, p. 3 (64, above).
- 303. Agreement, 10 Feb 43 (41, above).
- 304. Memo, 27 Feb 43, W.L. Langer to all Office and Branch Heads (37, above).
- 305. Status report. Sep 43, p. 25 (10, above).
- 306. Office of Basic and Geographic Intelligence.

 The History of the National Intelligence Survey

 Program. [By Dwight C. Johnson] Oct. 1968,
 p. 108, O/DCI/HS files. S.
- 307. Monthly report, Mar 44-Nov 45, MAPIS (64, above).
- 308. Status report, Sep 43, p. 19 (10, above).
- 309. Monthly report, Jun 43, MAPIS (64, above).
- 310. Memo, 3 Sep 43, Arthur H. Robinson to Dr. W.L.

 Langer, sub: [Map Service for Quebec Conference,
 15-25 Aug 43], ORR O/Ch files, folder: Chrono
 43, 1 Jun-31 Dec, box 2, RC Job No. 52-7, CIA

 Records Center. U.
- 311. Monthly report, Oct 43, MAPIS (64, above).
- 312. Ford, op. cit., pp. 165-166 (2, above).

 Also, Wilson, op. cit., p. 304 (17, above).

- 313. Memo, 3 Jan 44, Arthur H. Robinson to Dr.
 William L. Langer, sub: [Map Services for
 Cairo Conference, 21 Nov-10 Dec 43], ORR
 O/Ch files, folder: Chrono 44, 1 Jan-31 May,
 box 2, RC Job No. 52-7, CIA Records Center. S.
- 314. Monthly report, Jan 44, MAPIS (64, above).
- 315. Ibid., Feb 44.
- 316. Ibid., May-Jun 44.
- 317. Memo, 31 Jan 45, Capt. Arthur H. Robinson to Lt. (j.g.) C.W. Olmstead (181, above).
- 318. Monthly report, Jul 44, MAPIS (64, above).
- 319. Memo, 28 Sep 44, Arthur H. Robinson to Gen.
 William J. Donovan, sub: [Map Division
 Services at 1944 Quebec Conference -- OCTAGON],
 ORR O/Ch files, folder: Chrono 44, 1 Sep-31 Dec,
 box 2, RC Job No. 52-7, CIA Records Center. S.
- 320. Monthly report, Dec 44, MAPIS (64, above).
- 321. Memo, 17 Jan 45, Capt. John R. Tregenza to Mr. J. Ridge Hicks (158, above).
- 322. Memo, 7 Nov 45, Arthur H. Robinson to Map Division Personnel (162, above).
- 323. Monthly report, Jan 43-Nov 45, MAPIS (64, above).

 Also, Memo, 15 Jan 45, Lt. Arch C. Gerlach to

 Lt. Leonard S. Wilson (101, above).

- 148 -SECRET

- 324. Letter, 17 Sep 45, W.L. Langer to George Beishlag (107, above).
- 325. Monthly report, Apr-Aug 45, MAPIS (122, above).
- 326. Executive Order, 20 Sep 45 (160, above).
- 327. Memo, 7 Nov 45, Arthur H. Robinson to Map Division Personnel (162, above).
- 328. Letter, 20 Nov 45, A.H. Robinson to Lloyd D. Black (163, above).
- 329. Lists and memos, Map Division chrono file 1942-45, especially lists dated 1 Mar 43, 14 Apr 43, 11 Oct 44, 17 Jan 45, 8 Mar 45, 23 May 45, ORR O/Ch files, folders: Chrono 42-45, box 2, RC Job No. 52-7, CIA Records Center. S.
- 330. CIA. CIA/CR BR 62-6, Chinese Communist Men of Science, 1962, p. 187. S.
- 331. Chrono file, Map Division, R and A, OSS, ORR
 O/Ch files, [individual folders for irregular
 periods, 1941-45], box 2, RC Job No. 52-7,
 CIA Records Center. S.